

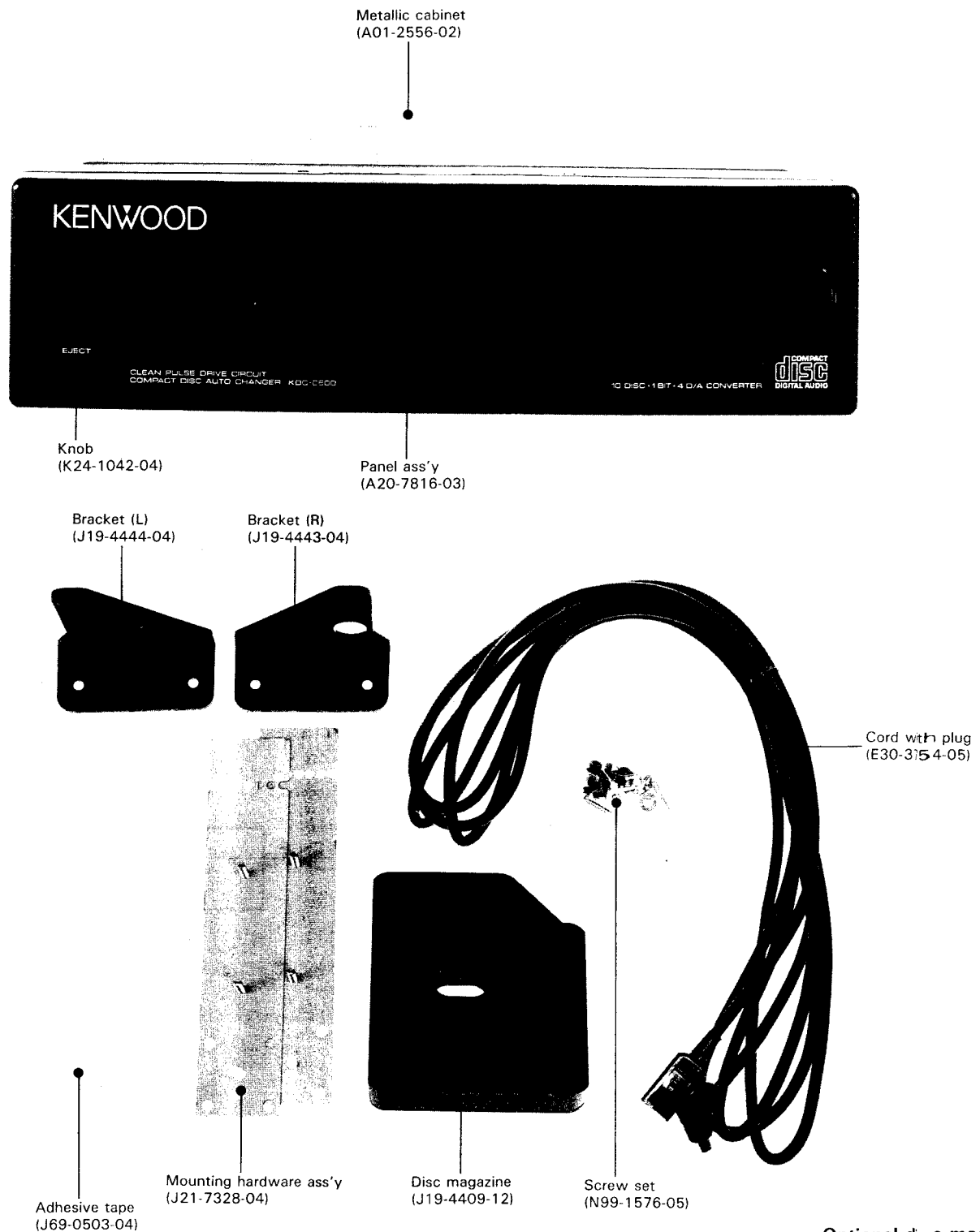
COMPACT DISC AUTO CHANGER

# KDC-C600

## SERVICE MANUAL

# KENWOOD

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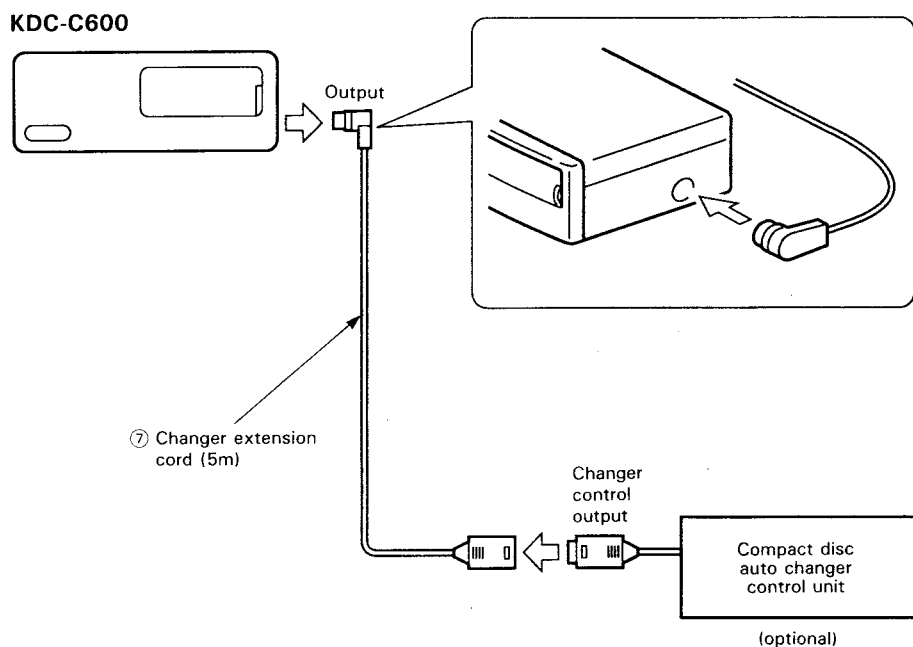
# KDC-C600

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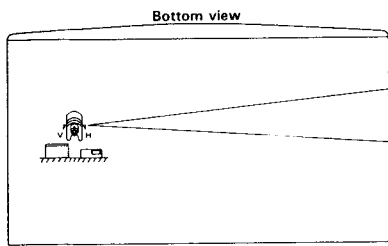
## CONNECTION

- When operating or checking this unit, use CD changer control receiver, KCA-R10, etc. as a control unit.



## OPERATION

- Be sure to turn the screw on the bottom of the unit according to the changer's installation orientation (horizontal or vertical). (The spring is set for horizontal installation when the unit is shipped from the factory.)

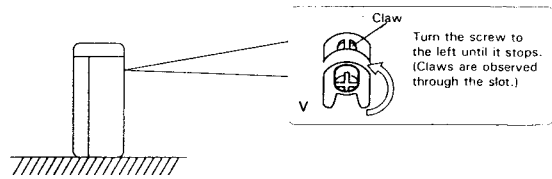


### CAUTION

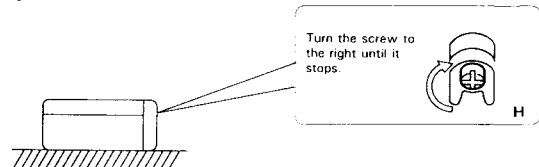
- The screw will not turn any further once it locks.
- If the screw is turned with the magazine inserted, the unit may be damaged. Be sure to eject the magazine before turning the screw. Turn the screw while pushing the screwdriver lightly.



- Vertical installation**  
(Turn the screw 180° to the left.)

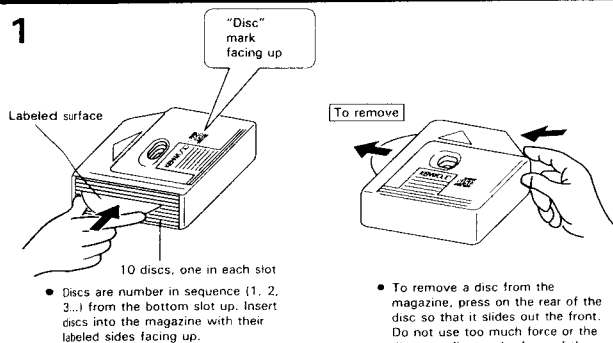


- Horizontal installation**  
(When switching from a vertical to horizontal installation, turn the screw 180° to the right.)



## LOADING COMPACT DISCS

1



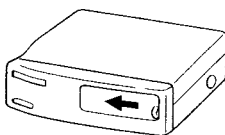
- Discs are numbered in sequence (1, 2, 3...) from the bottom slot up. Insert discs into the magazine with their labeled sides facing up.

- To remove a disc from the magazine, press on the rear of the disc so that it slides out the front. Do not use too much force or the disc may fly out the front of the magazine.

### CAUTION

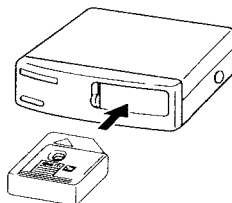
8 cm (3 in) CDs cannot be used in this unit. If an 8 cm (3 in) CD adapter is used, the disc will not eject.

2



- Open the door of the unit.

3

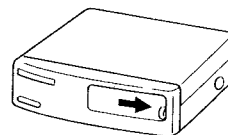


- Insert the disc magazine into the unit.

### NOTE

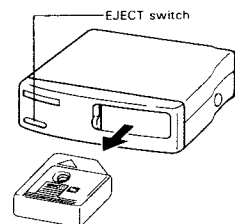
Insert the disc magazine till it clicks.

4



- Dust entering the unit will make the laser pickup dirty and adversely affect performance. Always be sure to keep the door closed.

5



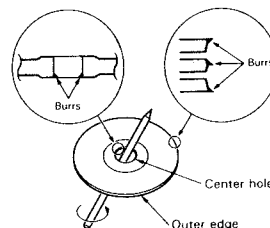
- To remove the disc magazine, open the door and then press the EJECT switch.

### NOTE

The magazine will not eject if the door is not completely open.

### CAUTION

<When using a new disc>



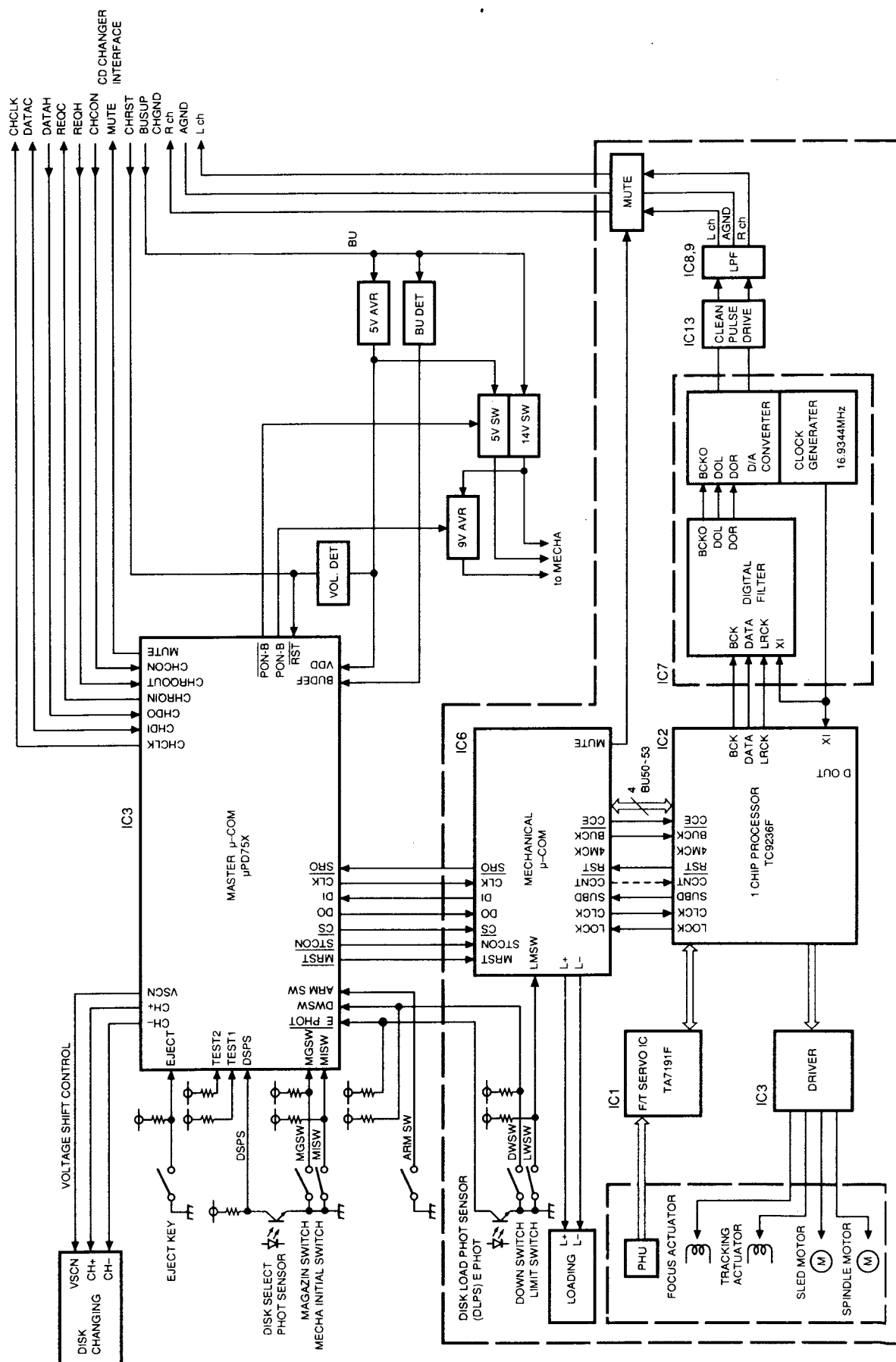
- Before using a new disc, be sure to check for burrs around the edges of the disc's center hole and outer circumference (see diagram at left). If burrs are present, use a ballpoint pen or similar instrument to remove them. If a disc is used with burrs still attached, the disc may not fit properly in the player or disc magazine, and the sound may tend to skip during playback.

<Disc accessories>

- There are several types of disc accessories (stabilizers, protective seals, etc.) on the market designed for various purposes such as sound quality improvement and disc protection. Use of such disc accessories will change the thickness or outer dimensions of the disc with the result that the disc will not conform to standard specifications. Discs with this type of accessory attached may cause the disc changer to malfunction and should therefore not be used with this unit.

# KDC-C600

## BLOCK DIAGRAM



## CIRCUIT DESCRIPTION

## CONTROL CIRCUIT UNIT (X29-2310-00)

Ref. No.	Device	Use and Function	Operation and Condition
Q1	2SB1050	Audio power SW	Supplies 14 B to MD.
Q2	2SB941	Servo power and mechanism up/down driver power AVR	
Q3	DTC124EK	CD-CH ON/OFF SW	
Q4	DTC124EK	CH-CH RST SW	
Q5	DTA124EK	Eject SW	
Q6	DTC124EK	Audio power SW	
Q7	2SB1188	5 V SW	
Q8	DTA124EK	Muting driver	Output to head unit.
Q9	DTC124EK	BU detector	
Q10	2SC2412K	Same as Q2	
IC3	75112GF-740-3BE	System $\mu$ -COM	CD-CH mechanism control, control of communications with mechanism controller, control of communications with head unit.
IC4	S-80737AN-DI	$\mu$ -COM RST IC	Reset occurs when VDD becomes 3.7 V.
IC5	SN74HC367ANS	Interface buffer	
IC7	TA7291P	Motor driver	Up/down operation.
IC8	M5278D05	5 V AVR	VDD for microcomputer.

## CD PLAYER UNIT (X32-2210-00)

Ref. No.	Device	Use and Function	Operation and Condition
IC1	TA8191F	RF amp	RF signal generation, focusing & tracking servo.
IC2	TC9236AF	Signal processor	EFM demodulation, error detection & correction, audio data output, disc motor servo, focusing & tracking servo control, search control.
IC3	AN8388SR	Actuator driver	Drives focusing, tracking, sled, spindle and actuator.
IC5	TA7291F	Motor drive	Loading and ejection control.
IC6	75008GB-672-3B4	$\mu$ -COM	CD mechanism control.
IC7	SM5870AS	D/A converter	1-bit digital-to-analog converter.
IC8, 9	NJM4580E	Low-pass filter	
IC11	TA78L05F	3-terminal regulator	Generates +5 V for audio circuitry.
IC12	TC7SU04F	Inverter	Inverts LRCK.
IC13	TC74AC04F	Inverter	Audio pulse output buffer.
Q1	2SB624 (BV3)	Laser power control	
Q2	2SA1037K	Temperature detector	
Q3	DTC124EK	Spindle gain SW	ON with 8 cm disc, OFF with 12 cm disc.
Q4	2SC2412K	Focusing error hold	Upon detection of scratch, goes ON to hold focusing error.
Q5	DTA124EK	Scratch detect pulse	Level conversion of disc scratch detection pulse.
Q7	DTC114YK	Gain SW	Switches low-frequency gain of tracking servo between play and search modes.
Q8	DTC114YK	Logic inverter	Inverts $\mu$ -COM output logic to control Q7.
Q9	2SA1037K	Reference potential generation	Generates 4.2 V in collaboration with TA8191F.
Q10	2SC2412K	Gain SW	Controls high-frequency gain of tracking servo.
Q11	DTC114YK	Gain SW	Reduces tracking servo upon detection of scratch.
Q12	DTC124EK	Clock SW	Turns 16 MHz master clock ON/OFF.
Q13	2SA1036K	+5 V SW	Turns +5 V for servo/digital circuitry ON/OFF.
Q14	2SD1624	Regulator	Generates +9 V for audio circuitry.

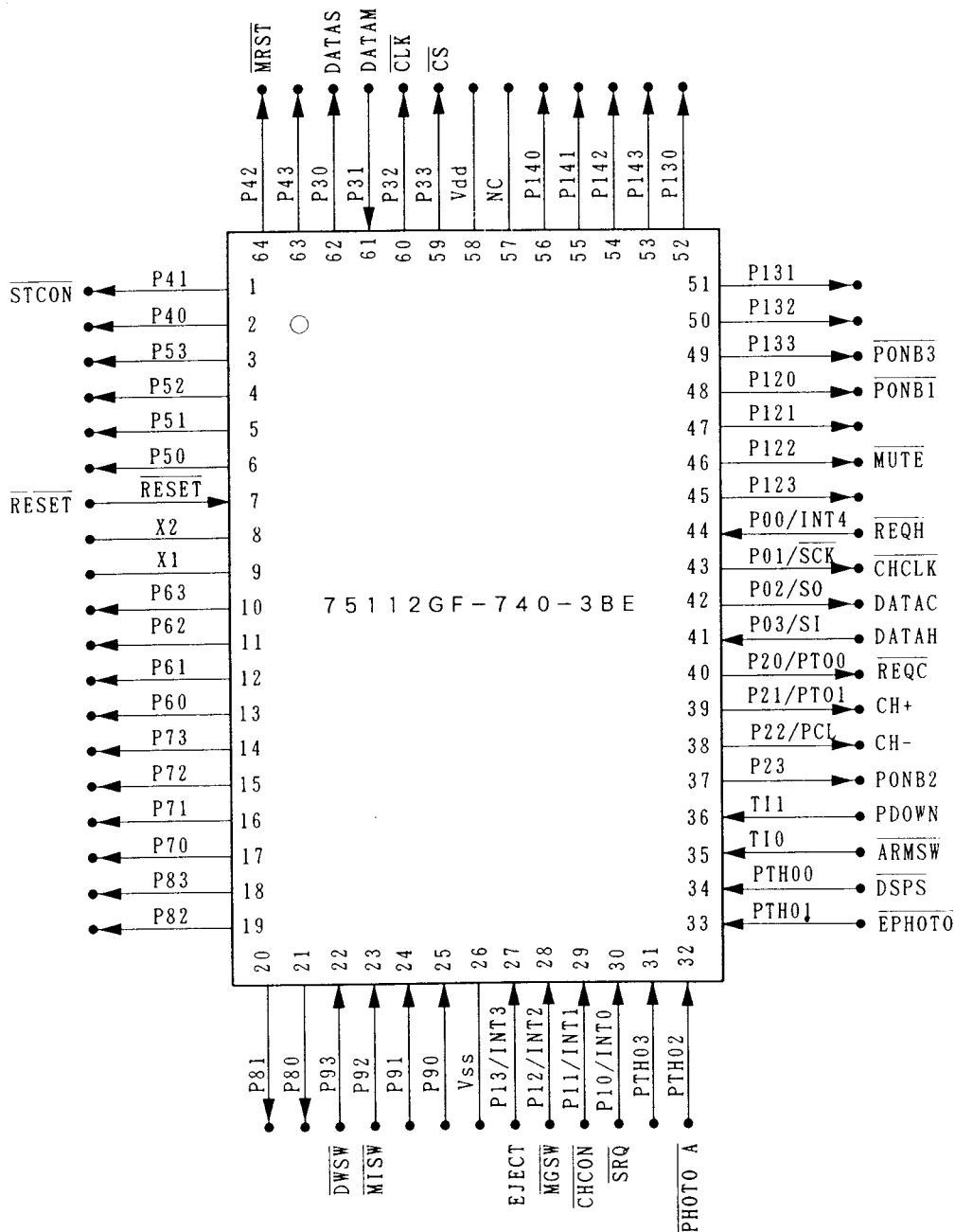
# KDC-C600

## CIRCUIT DESCRIPTION

Ref. No.	Device	Use and Function	Operation and Condition
Q15	DTA124EK	Audio muting control	Drives Q16 and Q17 based on level conversion of muting signal from $\mu$ -COM.
Q16, 17	2SD1757K	Audio muting	
Q18	DTC124EK	PLL control	Upon detection of scratch, sets PLL phase comparator output to Hi-Z.
Q19	DTC124EK	D/A reset	Releases reset of D/A converter in synchronism with the rise of master clock.
Q20	DTC124EK	Emphasis SW	Inverts the logic of emphasis control output from IC2.

### IC3: 75112GF-740-3BE (X29-2310-00) SYSTEM MICROCOMPUTER

#### 1: Terminal pin layout



## CIRCUIT DESCRIPTION

## 2: Terminal description

Pin	Port	Also used as:	I/O	Signal Name	Application
1	P41		O	STCON	MD $\mu$ -COM stop signal output. L for stop mode.
2	P40		O		Not used.
3	P53		O		Not used.
4	P52		O		Not used.
5	P51		O		Not used.
6	P50		O		Not used.
7	RESET		I	RESET	Hardware reset terminal.
8	X2		O	X2	System clock oscillator connection. 4.19 MHz.
9	S1		I	X1	System clock oscillator connection. 4.19 MHz.
10	P63		O		Not used.
11	P62		O		Not used.
12	P61		O		Not used.
13	P60		O		Not used.
14	P73		O		Not used.
15	P72		O		Not used.
16	P71		O		Not used.
17	P70		O		Not used.
18	P83		O		Not used.
19	P82		O		Not used.
20	P81		O		Not used.
21	P80		O		Not used.
22	P93		I	DWSW	Disc down detection. "L" when chucked.
23	P92		I	MISW	Mechanism deck reference position detection. "L" between (DISC2 $\rightarrow$ DISC1) and (EJECT).
24	P91		I		Not used.
25	P90		I		Not used.
26	Vss			GND	GND.
27	P13	INT3	I	EJECT	Eject SW. "H" with switch ON.
28	P12	INT2	I	MGSW	Magazine detection. "H" when magazine is present.
29	P11	INT1	I	CHCON	Changer ON. "L" for ON.
30	P10	INT0	I	SRQ	Communication service request from MD $\mu$ -COM. "L" for request.
31	PTH03		I		Not used.
32	PTH02		I	PHOTOA	MD-side loading photosensor. "H" while disc is passing.
33	PTH01		I	EPHOTO	Magazine-side photosensor. "H" while disc is passing.
34	PTH00		I	DSPS	MD position selection photosensor. "L" in normal stop position.
35	TI0		I	ARMSW	Loading arm SW. "H" during pulling disc in.
36	TI1		I	PDOWN	Power down detection. "H" indicates momentary power down.
37	P23		O	PONB2	Peripheral circuit power ON SW. H: power ON. L: OFF.
38	P22	PCL	O	CH-	Negative terminal of disc change motor.
39	P21	PT01	O	CH+	Positive terminal of disc change motor.
40	P20	PT00	O	REOC	Communications request line to head unit. Active "L".
41	P03	SI	I	DATAH	Communications data line from head unit.
42	P02	S0	O	DATAC	Communications data line to head unit.
43	P01	SCK	O	CHCLK	Communications clock line with head unit.
44	P00	INT4	I	REQH	Communications request line from head unit. Active "L".

## CIRCUIT DESCRIPTION

Pin	Port	Also used as:	I/O	Signal Name	Application
45	P123		O		Not used.
46	P122		O	MUTE	Muting output. H: MUTE ON. L: MUTE OFF.
47	P121		O		Not used.
48	P120		O	PONB1	Peripheral circuit power ON SW. H: OFF. L: ON.
49	P133		O	PONB3	Head unit communications IC power ON SW. H: ON. L: OFF.
50	P132		O		Not used.
51	P131		O		Not used.
52	P130		O		Not used.
53	P143		O		Not used.
54	P142		O		Not used.
55	P141		O		Not used.
56	P140		O		Not used.
57	NC				Connected to VDD.
58	VDD				+ 5 V.
59	P33		O	CS	Communication request to MD $\mu$ -COM. Active "L".
60	P32		O	CLK	Communications clock output to MD $\mu$ -COM. No more than 524 kHz.
61	P31		I	DATAM	Data line from MD $\mu$ -COM. LSB first.
62	P30		O	DATAS	Data line to MD $\mu$ -COM. LSB first.
63	P43		O		Not used.
64	P42		O	MRST	MD $\mu$ -COM reset.

### 3: Key matrix

This set does not have a key matrix.

### 4: Initial setup

This set does not need destination setup. But, at the time of initialization (reset), care should be used in the following points.

This set does not perform initial up/down operation unless all of the four sensors (PHOTOA, EPHOTO, DWSW, ARMSW) are clear (i.e. there is no disc in the magazine).

This set does not perform disc ejection while the magazine has already been ejected. If, when you attempt to reset it, there is a disc inside the MD and the magazine has been ejected insert the empty magazine or eject the disc in the test mode described in 5, then reset the set.



## CIRUIT DESCRIPTION

### 5: Test mode

The operation test mode with the specifications described below can be initiated using the CD changer fabricated by us. This test mode functions when the head unit is provided with the changer control function. (The test mode may not function with certain sets.)

#### 1. Test mode initiation method

Make sure that no disc is present in the mechanism deck.

Fully open the CD changer door (in order to turn door switch S32 ON).

Press and hold the magazine eject switch on the CD changer, and press the reset switch on the head unit.

First release the reset key alone, then release the eject key.

Start up the head unit and select the changer mode. On this point, the head unit display should show "E-88".

(The display may not be proper with certain head units. In addition, if the connection check method is not normal, the operation may not occur.)

#### 2. Operation

In the test mode, disc loading, ejection and the mechanism deck up/down operations can be performed as desired using the key operations listed below. Every operation occurs only while the corresponding key is ON, and stops when the key is OFF.

[Loading operation]

Press the forward track search key to start disc loading operation. This operation is canceled (stopped) when the key is switched OFF.

[Ejection operation]

Press the reverse track search key to start disc ejection operation. This operation is canceled (stopped) when the key is switched OFF.

[Mechanism deck up operation]

Press the disc select (+) key to move the mechanism deck toward disc No. 10. This operation is canceled (stopped) when the key is switched OFF.

[Mechanism deck down operation]

Press the disc select (–) key to move the mechanism deck toward disc No. 1. This operation is canceled (stopped) when the key is switched OFF.

#### 3. Test mode cancellation method

Normal operation can be resumed by canceling the CD changer mode, resetting the set or turning Acc OFF.

However, it should be noted that the microcomputer of the CD changer starts reset operation when the mode is returned to normal operation. Therefore, if a disc is left inside the mechanism deck, a trouble such as double insertion of discs may occur. To prevent this, make sure that no disc is left inside the mechanism disc before returning to the normal operation mode (Double insertion will not occur if the mechanism deck is stopped in a position with which the magazine is capable of accommodating the disc.)

#### 4. Other notes

The operation does not occur with a remote-controlled set such as the KCA-R1 and KCA-R20. Even with ordinary sets, operation by remote control is not possible.

The test mode should be run with a stable power supply. In case of power down, be sure to press the reset key and restart from the beginning.

If communications with the head unit is not available after quitting the test mode, reset the set.

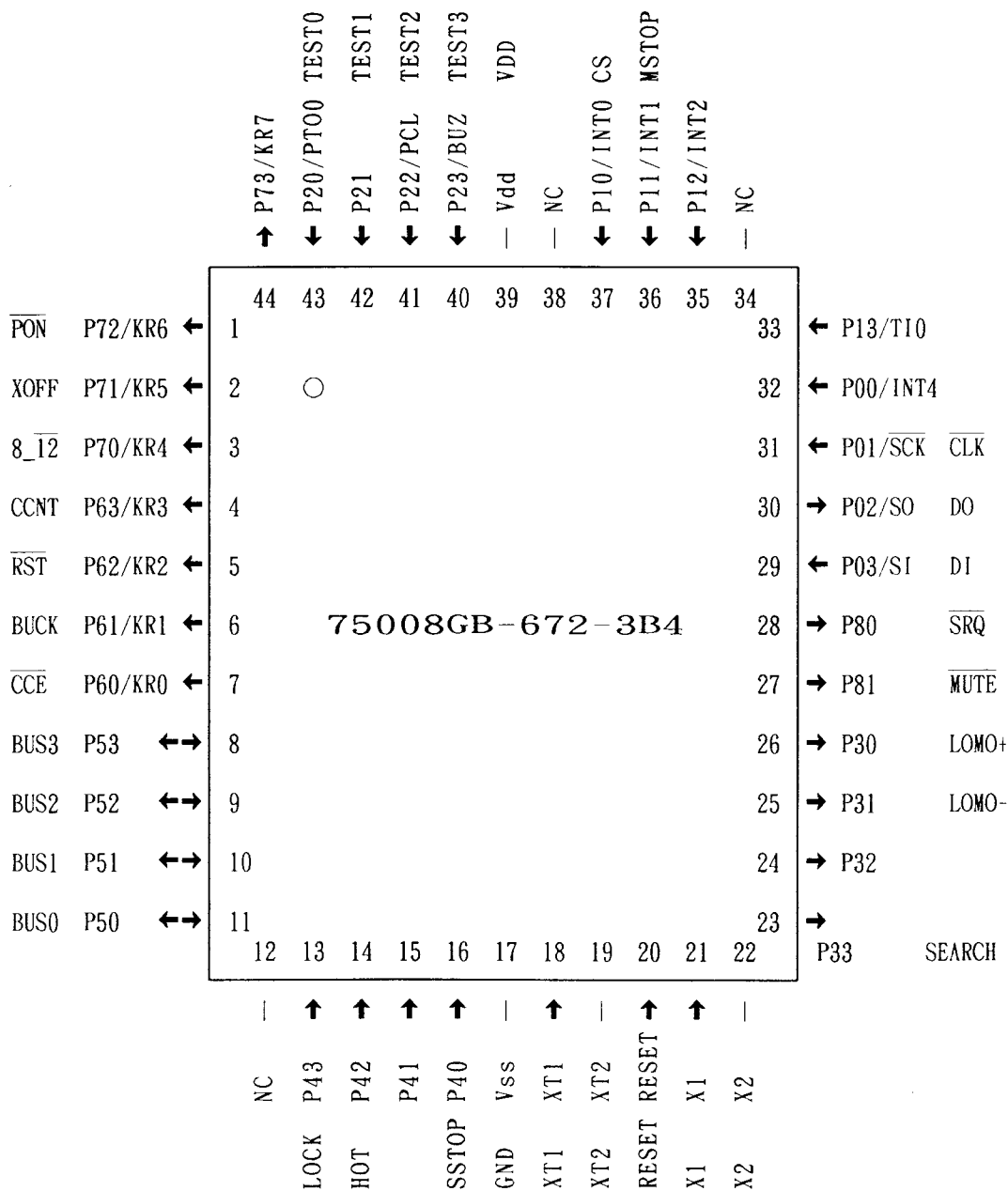
If no operation occurs after the mode start operation, reset the set to make doubly sure.

# KDC-C600

## CIRCUIT DESCRIPTION

IC6: 75008GB-672-3B4 (X32-2210-00)  
MICROCOMPUTER

### 1. Terminal pin layout



## CIRCUIT DESCRIPTION

## 2. Terminal description

Pin	Port	Also used as:	I/O	Signal Name	Application
1	P72	KR6	O	PON	+5 V power control of TC9236F, etc. "L" for ON.
2	P71	KR5	O	XOFF	Servo clock OFF (16 MHz). "H" for OFF.
3	P70	KR4	O	8_12	Disc size switching. "H" for 8 cm.
4	P63	KR3	O	CCNT	TC9236F subcode update inhibit output. "H" for inhibit.
5	P62	KR2	O	RST	TC9236F reset. "L" for reset.
6	P61	KR1	O	BUCK	TC9236F command/data communications clock.
7	P60	KR0	O	CCE	TC9236F chip enable. "L" for active.
8	P53		I/O	BUS3	TC9236F command/data communications bus.
9	P52		I/O	BUS2	TC9236F command/data communications bus.
10	P51		I/O	BUS1	TC9236F command/data communications bus.
11	P50		I/O	BUS0	TC9236F command/data communications bus.
12	NC				
13	P43		I	LOCK	EFM lock signal from TC9236F. "H" for lock.
14	P42		I	HOT	Hot temperature detection. "H" with hot temperature.
15	P41		I		Not used. Connected to GND.
16	P40		I	SSTOP	Sled limit switch. "L" with innermost position.
17	Vss			GND	Connected to GND.
18	XT1		I	XT1	Subclock input. Not used, connected to GND.
19	XT2		O	XT2	Open.
20	RESET		I	RESET	$\mu$ -COM reset input. "L" for reset.
21	X1		I	X1	Main clock 4.19 MHz oscillator connection.
22	X2		O	X2	Main clock 4.19 MHz oscillator connection.
23	P33		O	SEARCH	Search status output. "H" during search.
24	P32		O		
25	P31		O	LOMO-	CD mechanism load motor -.
26	P30		O	LOMO+	CD mechanism load motor +.
27	P81		O	MUTE	Muting output. "L" for muting ON.
28	P80		O	SRQ	Communications service request to system controller. "L" for requesting.
29	P03	SI/SB1	I	DI	Serial data input from system controller.
30	P02	SO/SB0	O	DO	Serial data output to system controller.
31	P01	SCK	I	CLK	Serial communications clock from system controller.
32	P00	INT4	I		Not used. Connected to GND.
33	P13	TIO	I		Not used. Connected to GND.
34	NC				
35	P12	INT2	I		Not used. Connected to GND.
36	P11	INT1	I	MSTOP	Mechanism control stop. "L" for stop and oscillation finish.
37	P10	INT0	I	CS	Communications service request from system controller. "L" for request.
38	NC				
39	VDD			VDD	Power, +5 V.
40	P23		I	TEST3	Test input terminal 3. "H" for test mode.
41	P22		I	TEST2	Test input terminal 2. "H" for test mode.
42	P21		I	TEST1	Test input terminal 1. "H" for test mode.
43	P20	PTO0	I	TEST0	Test input terminal 0. "H" for test mode.
44	P73	KR7	O		Open.

## CIRCUIT DIAGRAM

### 3. Test modes

These test modes are designed to allow checking the servo system even in the stand-alone condition with which the system controller is not present, for example during the mechanism deck production process. They also allow to load or eject a disc without the system controller.

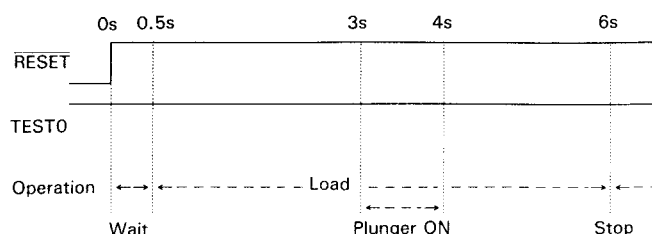
- Setup method and procedure

The test modes are set regardless of the system controller, but by reading the test terminal statuses during reset operation.

One of the following three modes can be set according to the statuses of the four test terminals. In any test mode, the servo and mechanism powers should already be turned ON before resetting.

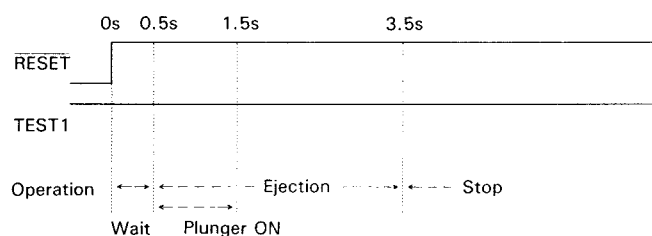
#### 1) Self-loading

Loading starts when TEST0 terminal is "H" during reset. However, as the mechanism controller does not check the sensors, the timing is always constant as shown below. Therefore, correct chucking should be checked visually or by monitoring the DOWN SW.



#### 2) Self-ejection

Ejection starts when TEST1 terminal is "H" during reset. Similarly to the self-loading mode, the timing is constant as shown below.



#### 3) Servo check

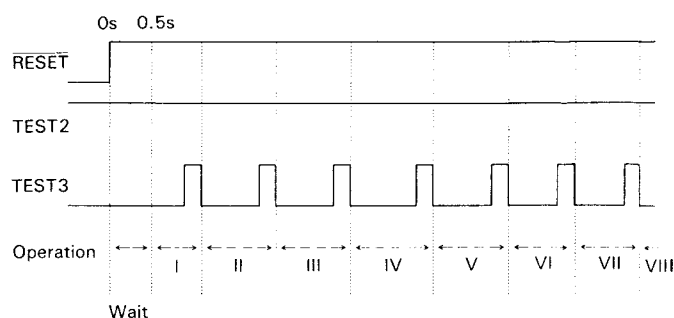
The servo check mode can be initiated when TEST2 terminal is "H" during reset. In this mode, the operations of the mechanism and servo can be activated and checked sequentially by simply applying "H" pulse to TEST3 terminal. If both TEST2 and TEST3 terminals are "H" during reset, the operation shown below occurs automatically and the last track plays.

As the pulse applied to TEST3 is not subjected to chattering cutting, only a pulse with duration from 100 ms to 1 s can be accepted.

The servo-related settings are for use with 12 cm disc only.

- Note

The test modes can be canceled by resetting again or by entering the stop mode. Communications with the system controller are not performed in the test modes. In case more than one test terminal goes "H" simultaneously, the priority is given in order from TEST0 to TEST1 then TEST2.



- I. Stop. No operation until pulse is applied.
- II. Feed motor set at home position.
- III. Laser diode ON.
- IV. Focusing servo ON.
- V. Disc motor kicked, CLV ON.
- VI. Tracking servo and feed servo ON.
- VII. First track played.
- VIII. Last track searched and played.

## MECHANISM OPERATION DESCRIPTION

### 1. Mechanism structure (configuration)

Roughly speaking, the mechanism is composed of the following four functions.

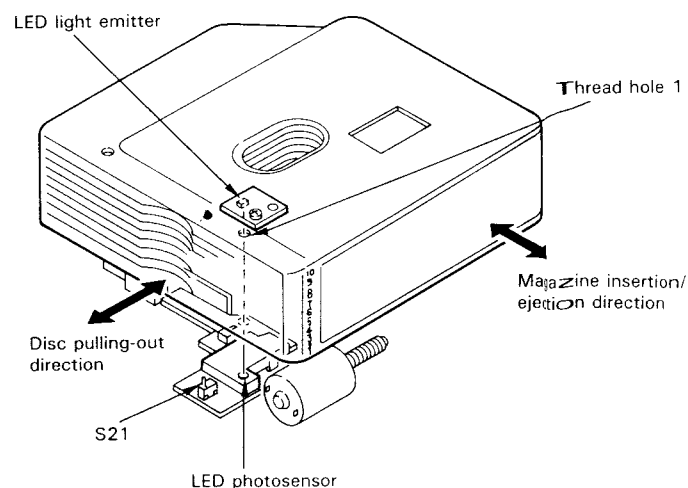
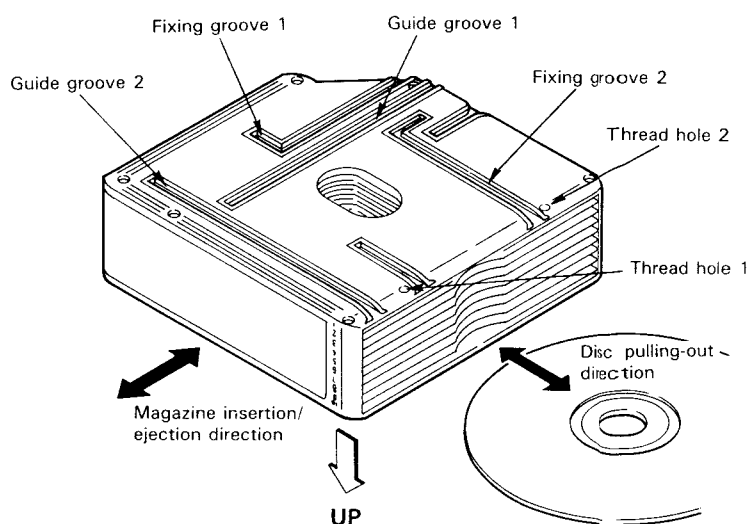
- (1) Mechanism of loading, retaining and ejecting the magazine.
- (2) Function pushing the disc out of the magazine.
- (3) Mechanism made up of the sled motor, spindle motor, pickup, etc., which pulls the disc pushed out of the magazine with rollers, sets it on the turntable, plays it, and moves it into the magazine at the time of ejection (often called CD mechanism section).
- (4) Function moving the integrated mechanism of (2) and (3) up and down to the positions which allow to push the disc out of the magazine or to play the disc.

### 2. Magazine loading and ejection operations

When the magazine is seen from the bottom side, you find two guide grooves and two fixing grooves on it.

The current mechanism uses guide groove 1 and fixing groove 1. Guide groove 2 and fixing groove 2 are to be used when the magazine insertion/ejection direction becomes the same as the disc pulling-out direction in the future.

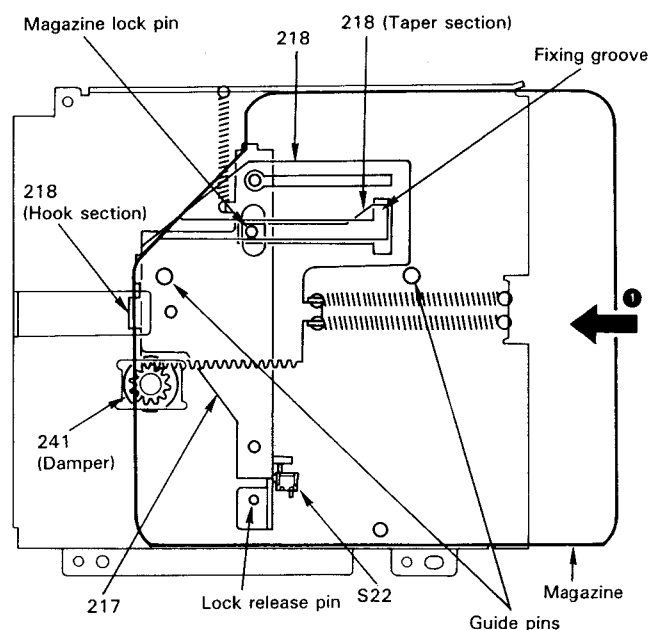
Thread holes 1 and 2 are used in combination with the LED light emitter and photosensor diode in order to detect the movement of discs inside the magazine.



## MECHANISM DESCRIPTION

### (1) Magazine loading

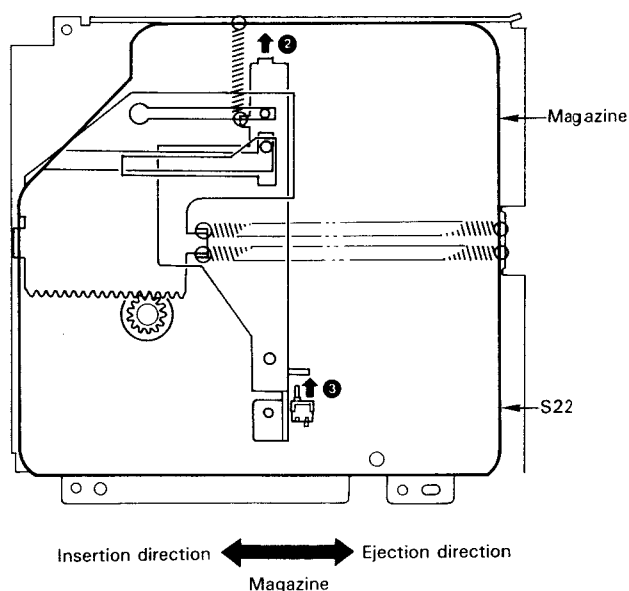
The magazine is inserted by hand. When the magazine is inserted **①** using the guide pins as the guide and against the ejecting force of the lever (218), the magazine lock pin on the lever (217) is released (from the taper section of the lever (218)). When the magazine is inserted further, the lever (217) is slid **②**, the lock pin enters the fixing groove on the magazine, and the magazine is locked by the ejecting force of the lever (218). When the lever (217) is slid and the magazine is locked, the switch (S22) is turned OFF, enabling the detection of the presence of the magazine **③**.



### (Initial setup of loading mechanism)

When the switch (S22) is turned OFF for the first time, motor MM1 starts rotation in the clockwise direction (when seen from the output shaft side) to rotate the gear (230) clockwise and move the loading mechanism upwards until the initial position detection switch (S21) on the loading mechanism is turned OFF. Then, motor MM1 is inverted so the switch (S21) is turned ON again, and the motor stops when the first hole on the gear (230) is detected **⑤**.

This condition becomes the initial status with the position which allows to load or eject the first disc in the magazine.

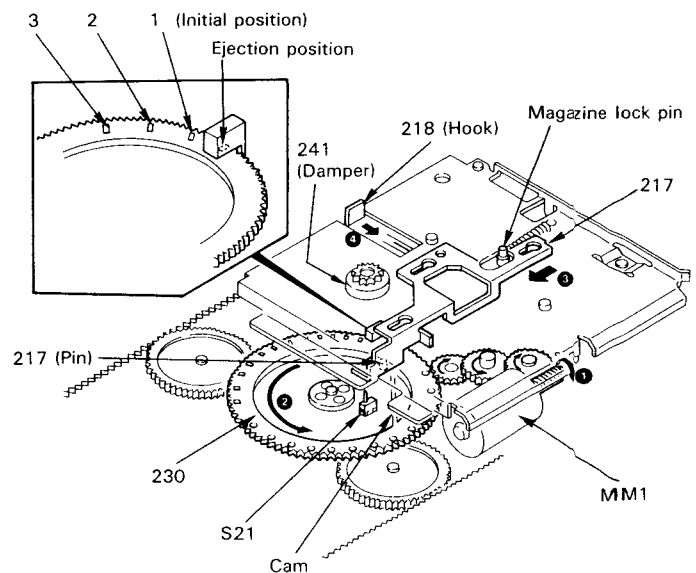
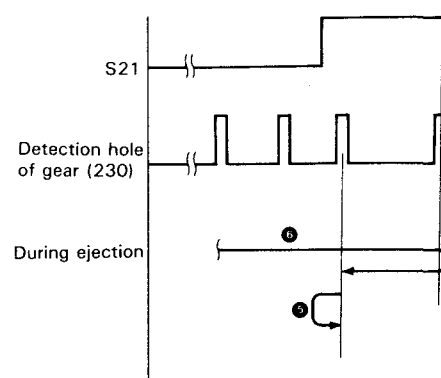


## MECHANISM DESCRIPTION

### (2) Magazine ejection

The magazine is ejected using motor MM1. The motor rotation ① is transmitted to the gear (230) ②. The cam of the gear (230) pushes the pin of the lever (217) and releases the locking of the magazine by sliding the lever (217) ③.

As a result, with the force of a spring, the lever (218) ejects the magazine ④. During ejection, the damper (241) interlocked with the lever (218) prevents the magazine from popping out. On the other hand, the movement of the gear (230) reverses after the ejection hole is detected, and stops when the first hole (first hole found after inversion) is detected (initial condition) ⑥.

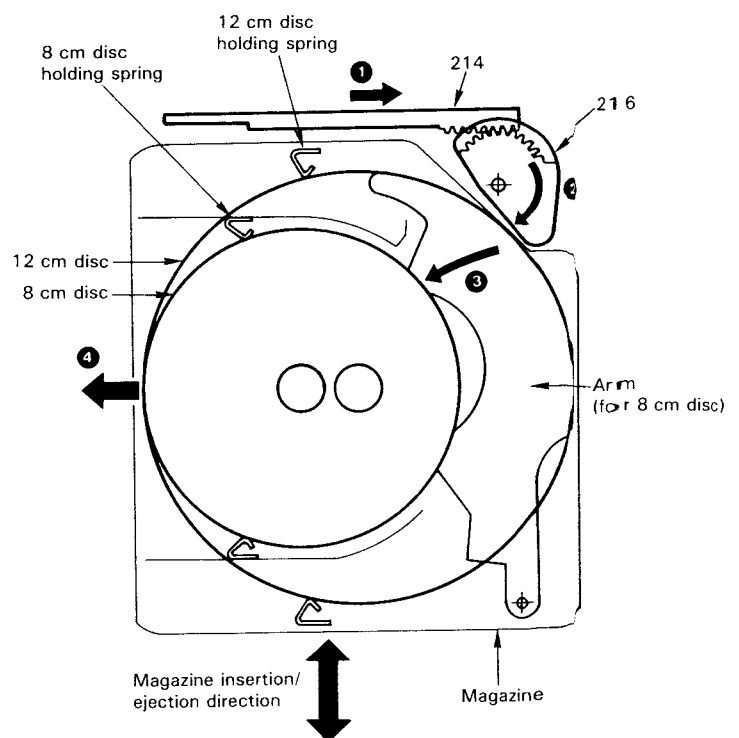


### 3. Loading and ejection of disc from/into magazine

The disc is pushed out of the magazines by the levers (214) (216) on the mechanism side. When the lever (214) slides from the mechanism side ①, the lever (216) rotates clockwise ②. With a 12 cm disc, this rotation pushes the circumference of the disc and pushes it out ④.

With an 8 cm disc, the disc is pushed out by means of an arm provided inside the magazine. While all discs are inside the magazine, the mechanism of the levers (214) (216) which travel together with the loading mechanism can move up and down. However, when one of the discs is loaded in the mechanism, the up and down movement is not possible because the lever (216) is interfered with the magazine.

\* The 8-cm disc magazine is not available for KDC-C600.



## MECHANISM DESCRIPTION

### (1) Disc loading

The disc loading operation of the mechanism starts with the rotation of motor M3 (5). This power is transmitted via the reduction gear train (6), and rotates the roller (238) (7) to make it ready to pull in the disc ejected from the magazine.

On the other hand, the power is also transmitted from the reduction gear train to the pendulum gear (226), rotating the pendulum (215) (8), rotating the gear (227) (9), sliding the lever (214) (10), and rotating the lever (216) (11), thereby allowing to push the disc out (12) (13).

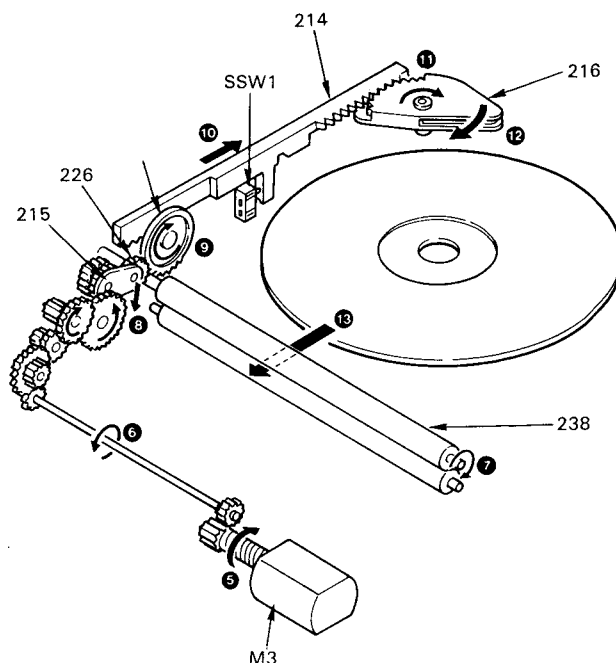
When the lever (214) is slid, SSW1 is turned OFF so that the projection of the lever (216) can be detected.

With the current condition, it is not possible to move the loading mechanism up or down. After the disc is pulled in by the roller (238), the disc is forwarded to the specified position with the same steps as with the DXM-200 (single-product CD mechanism).

\* Also refer to the service manuals of the KDC-77R, KDC-76D, etc.

### (2) Disc ejection

The disc ejection into the magazine follows the reverse steps to the loading operation steps. The disc ejected by the roller (238) of the loading mechanism is placed to the specified position by the holding plate spring inside the magazine. At this time, the lever (216) will not interfere with the disc because it has already been returned to the original position by the reversed loading operation.

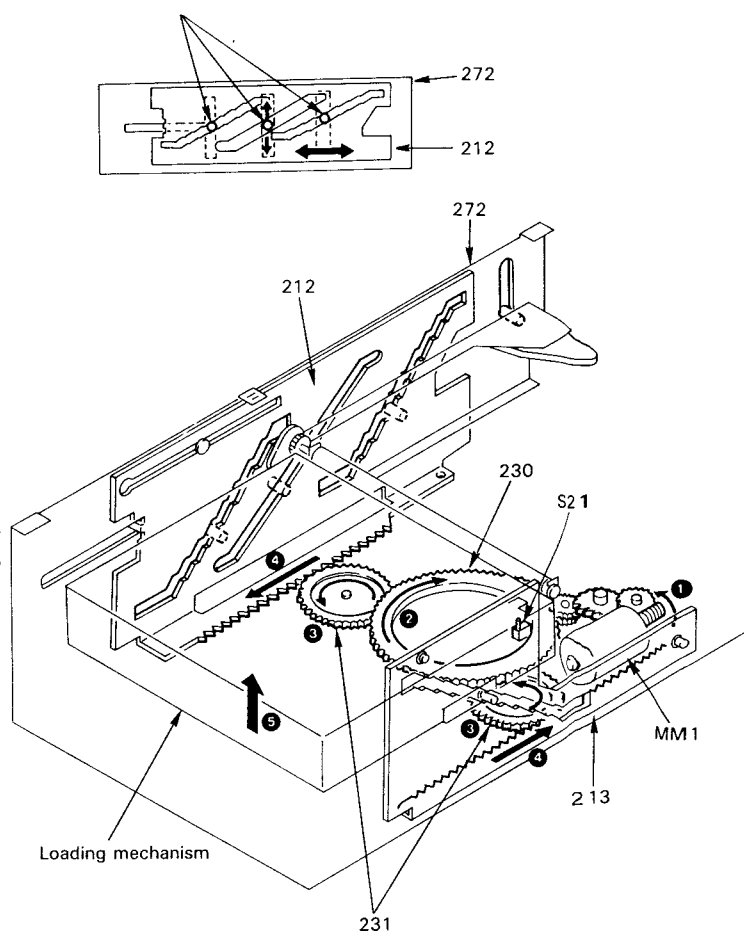


### 4. Up/down movement of loading mechanism

The movement is provided by the pins which pierce both of the fixed plates with vertical long grooves (272) (702) and the slide plates with oblique long grooves (212) (213). When the slide plates (212) (213) slide to the left or right, the pins move up or down along the long grooves on the fixed plates (272) (702).

With this mechanism, the oblique long grooves on the slide plates have staircase shapes. A total of five pins are projected from the mechanism.

When motor MM1 rotates (1), the gear (230) is rotated via the reduction gear train (2). The rotation of the gear (230) rotates the gear (231) meshed to it (3), thereby driving the slide plates (212) (213) (4) and moving the loading mechanism. This action is reversed when the motor rotates in the reverse direction. The position of the mechanism is detected with the hole on the gear (230).





## ADJUSTMENT (MECHANISM)

### Assembling the mechanism

#### (1) Chassis ass'y

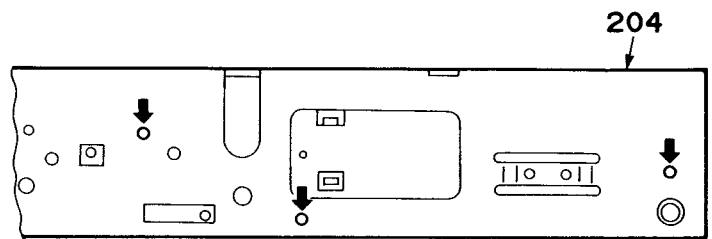
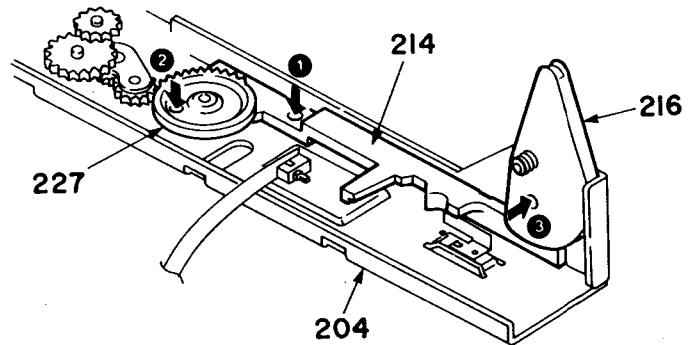
##### [Description]

Assemble this ass'y by aligning the holes of the gear (227), slider (214) and lever (216) with the hole on the chassis (204).

##### [Assembly operation]

1. Align the hole of the chassis (204) with that of the slider (214). ❶
2. Attach the gear (227) by aligning the hole of the gear (227) with that of the chassis (204). ❷
3. Attach the lever (216) by aligning the hole of the lever (216) with that of the chassis (204). ❸

Arrows → indicate the hole positions.



Side view

#### (2) Chassis caulking ass'y motor

##### [Description]

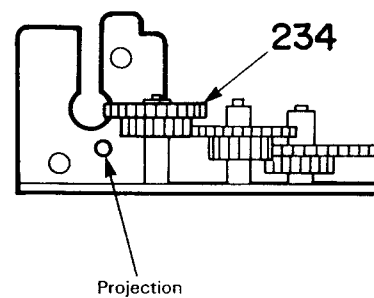
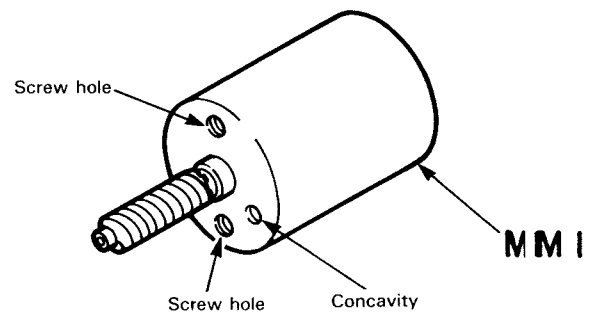
Attach the motor by taking care of the position.

##### [Assembly operation]

Attach by aligning the projection on the chassis caulking ass'y (205) and the concavity on the motor (MM1).

##### [Service note]

If the motor position is inverted by 180°, the worm gear (235) of the motor comes in violent contact with the reduction gear (234) and the motor cannot rotate.



## ADJUSTMENT (MECHANISM)

### (3) Chassis caulking ass'y gear (230)

#### [Description]

Adjust the position of the gear (230).

#### [Assembly operation]

Rotate the gear (230) to align the hole of the gear (230) with that of the chassis caulking ass'y (205). ④

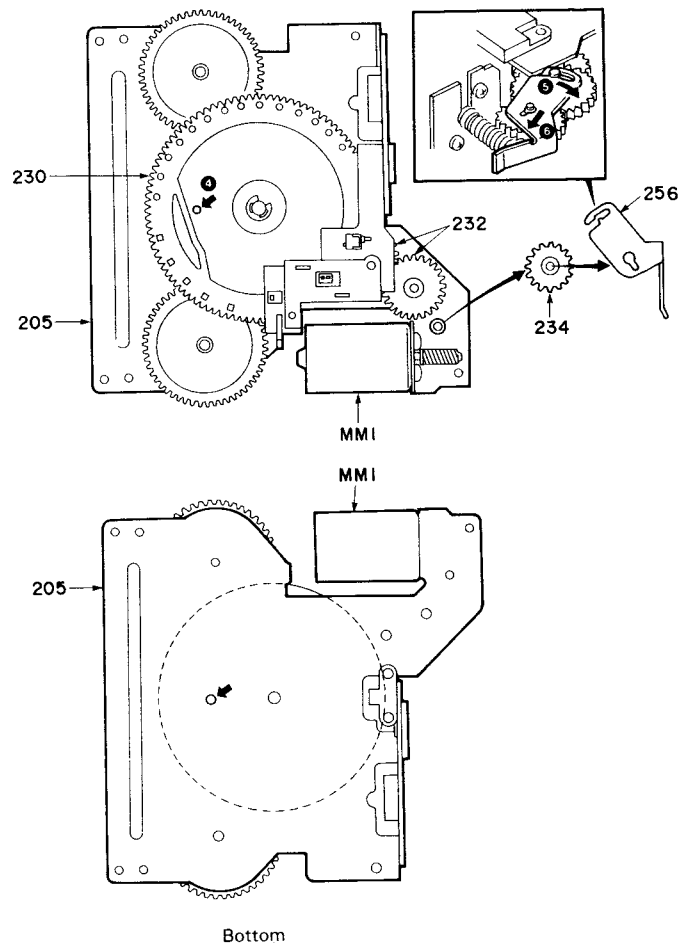
#### [Service note]

The gear (230) will not move if the reduction gears (234) (232) and motor are fixed.

The gear (230) can be moved freely by removing the fixing hardware (256) and removing the gear (234).

To remove the fixing hardware (256), rotate it in the direction ⑤ and move in the direction ⑥.

After aligning the position of the gear of the hole (230), attach the gear (234) then the fixing hardware (256).



### (4) Chassis caulking ass'y

#### [Description]

Attach the chassis caulking ass'y (205) onto the chassis (702) by aligning the hole on the slider ass'y (213) with that on the chassis (702).

#### [Assembly operation]

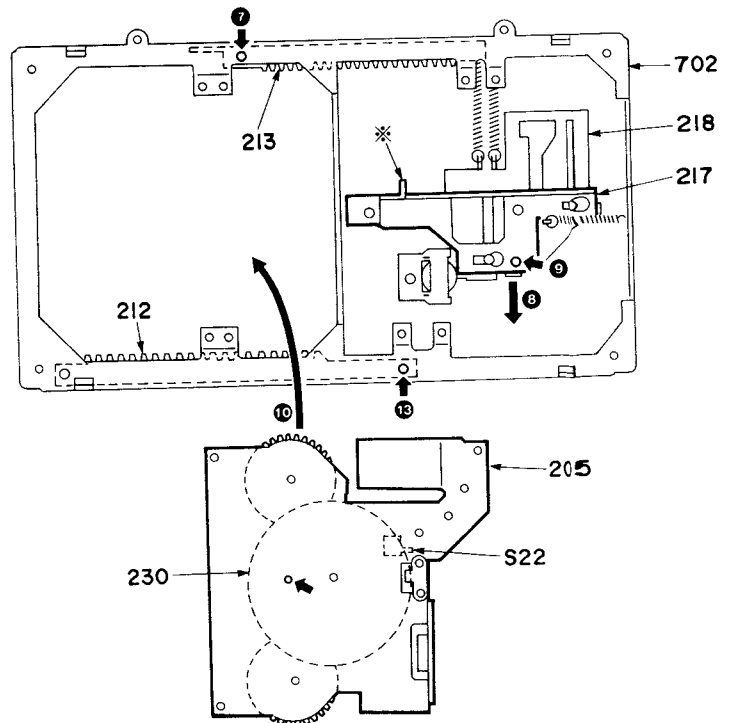
- Slide the slider ass'y (213) to align the hole of the slider ass'y (213) with that of the chassis (702). ⑦
- By pulling the slider (218) toward the direction of ⑧, move the slider (218) until the hole on it is aligned with that on the lever ass'y (217). ⑨
- Attach the chassis caulking ass'y (205) onto the chassis (702). ⑩

#### [Service note]

If assembly operation step 2 is not executed, the switch (S22) will come in contact with the section marked (※), and the switch (S22) will be damaged.

To make the assembly operation easier, it is recommended to pull the slider (218) towards the direction of ⑧ to move it until the positions of the holes are aligned and to insert a pin, etc., into the aligned holes ⑨ so that the slider does not return even when your hand releases it.

After attaching the chassis caulking ass'y (205), be sure to remove the pin, etc.



## ADJUSTMENT (MECHANISM)

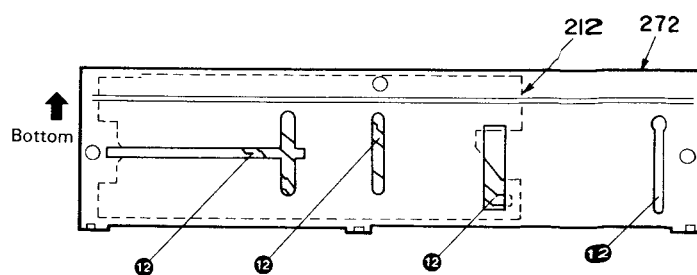
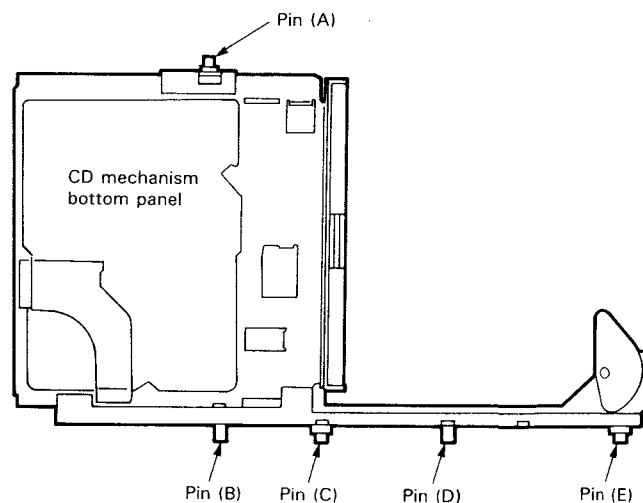
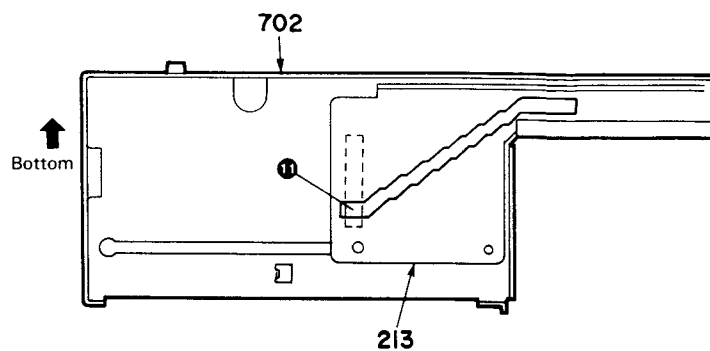
### (5) Assembly of CD mechanism and chassis (272)

#### [Description]

Assemble the CD mechanism, chassis (272) and slider (212) together by aligning the hole of the slider (212) with that of the chassis (272).

#### [Assembly operation]

1. Insert the pin (A) projected from the CD mechanism into the intersection holes of the chassis (702) and slider ass'y (213). ⑪
2. Insert the pins (B) (C) (D) (E) projected from the CD mechanism into the intersection holes of the chassis (272) and slider (212). ⑫
3. Slide the slider (212) to align the hole of the slider (212) with that of the chassis (272). ⑬
4. Attach the chassis (272) to the chassis (702).

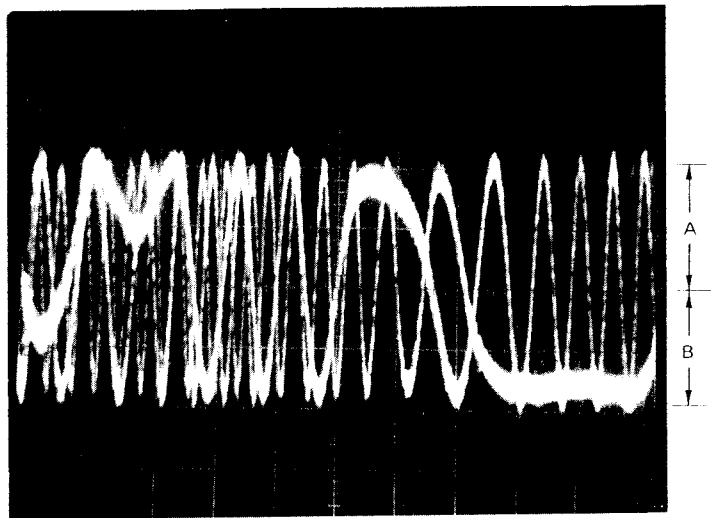


## ADJUSTMENT (ELECTRIC)

### 1. Tracking offset adjustment

1. Connect a test jumper wire between the test point (TEST2) and (+5 V).
2. Connect a test jumper wire between the test point (TOFF) and (Vref).
3. Connect an oscilloscope between the test point (TE) and (Vref).
4. Put the set into play mode by loading the disc.
5. Adjust VR2 so that the oscilloscope reading is symmetrical in relation to 0 V.
6. After adjusting, reset 1 and 2 as original.

Volt/Div: 200 mV Timer/Div: 0.5  $\mu$ sec.



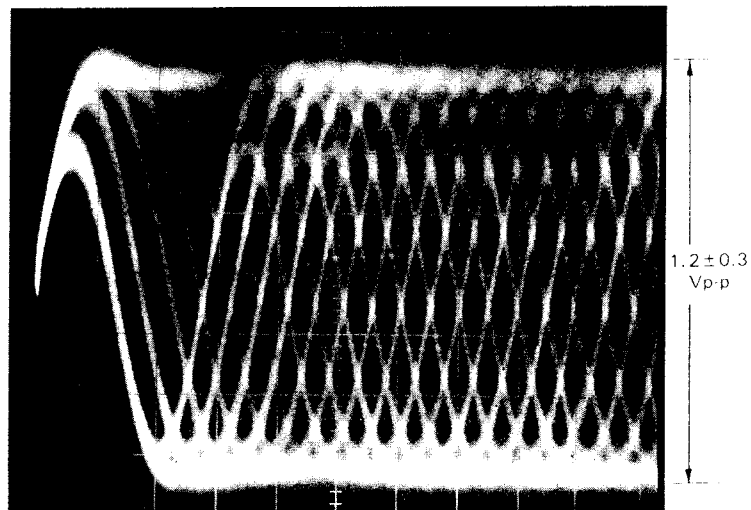
A = B

### 2. Focus offset adjustment

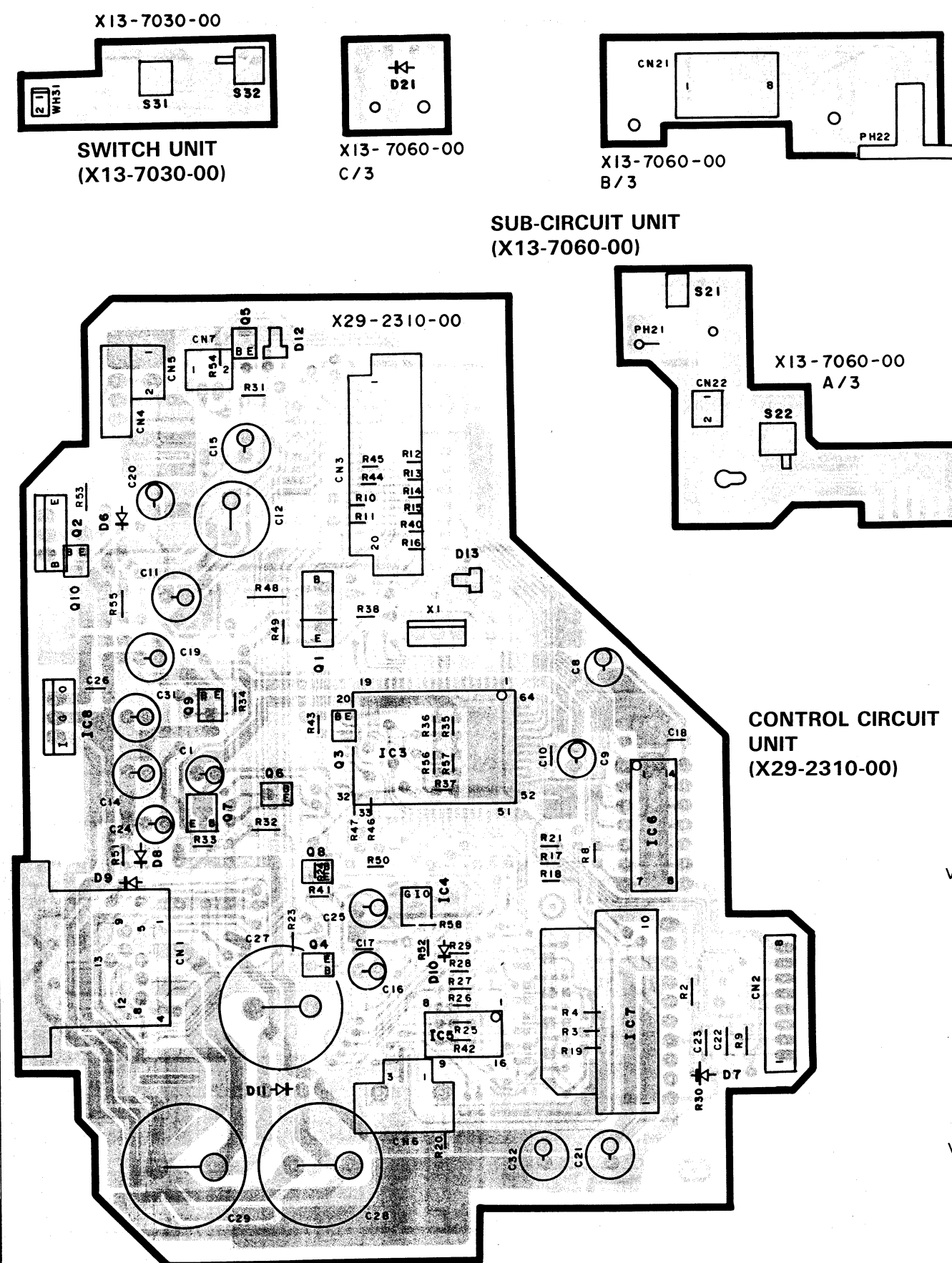
1. Connect an oscilloscope to the test point (RF).
2. Put the set into play mode by loading the disc.
3. Adjust VR1 so that the oscilloscope waveform eye pattern is good.

A good eye pattern means that the diamond shape ( $\diamond$ ) in the center of the oscilloscope can be clearly distinguished.

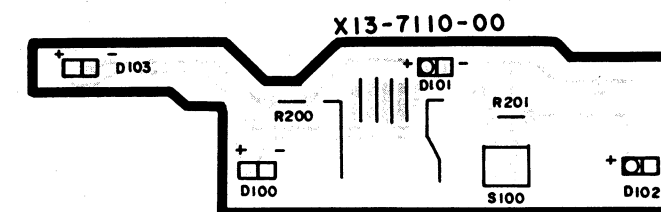
Volt/Div: 200 mV Timer/Div: 0.5  $\mu$ sec.



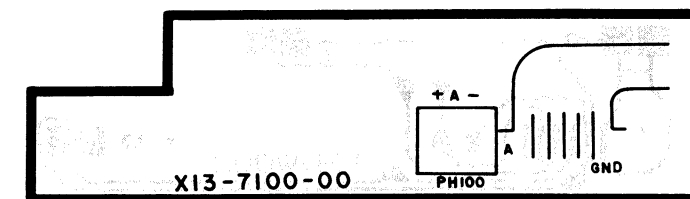
# PC BOARD (Component side view)



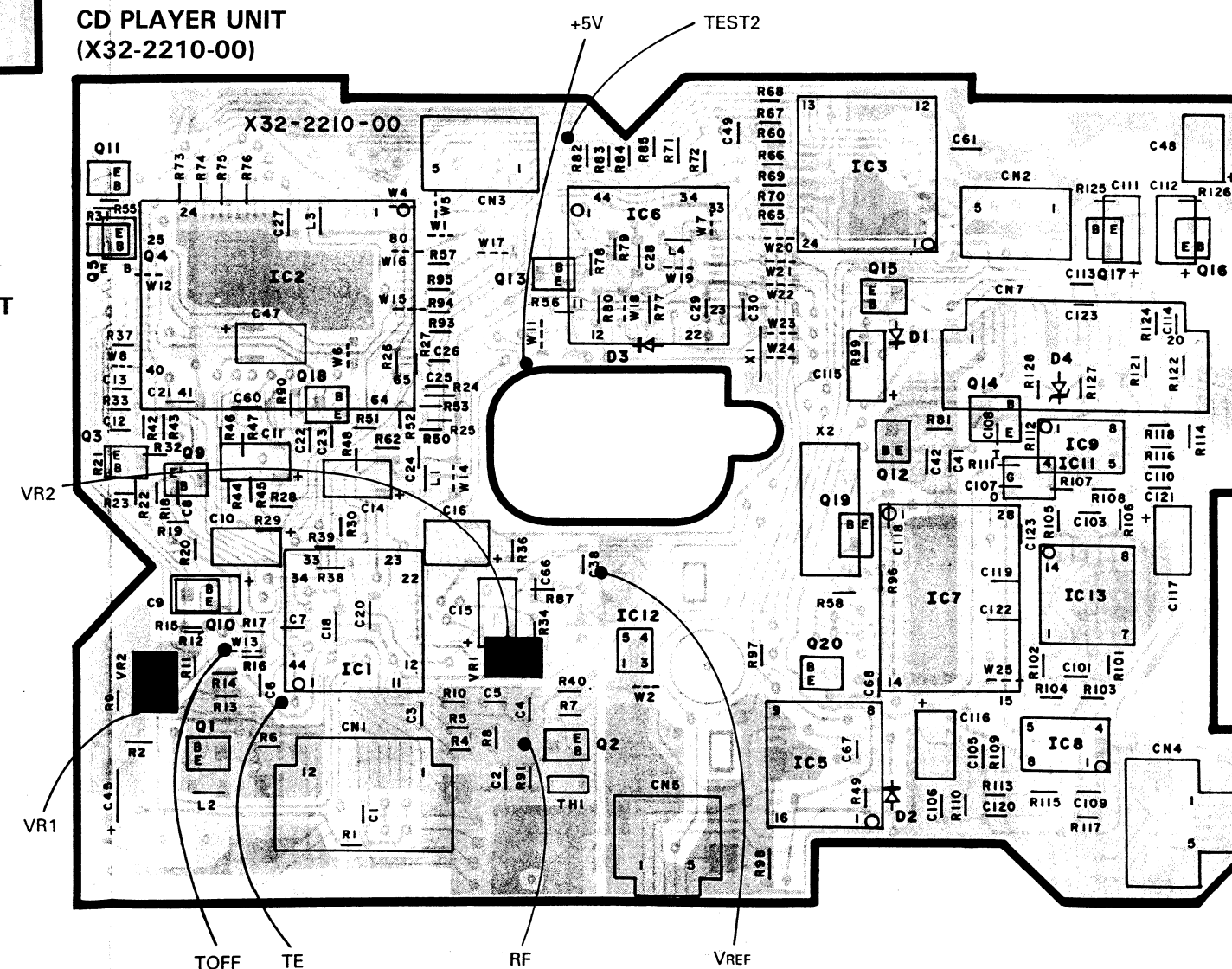
## SUB-CIRCUIT UNIT (X13-7110-00)



## SUB-CIRCUIT UNIT (X13-7100-00)

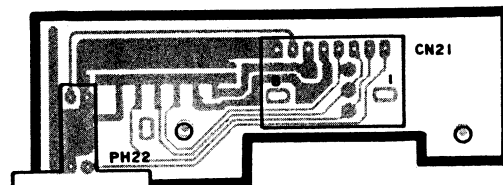


## CD PLAYER UNIT (X32-2210-00)

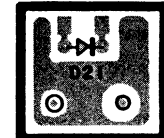


Refer to the schematic diagram for the values of resistors and capacitors.

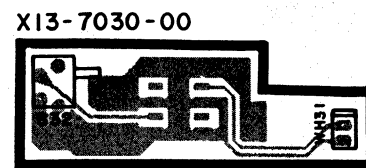
# PC BOARD (Foil side view)



X13-7060-00  
B/3

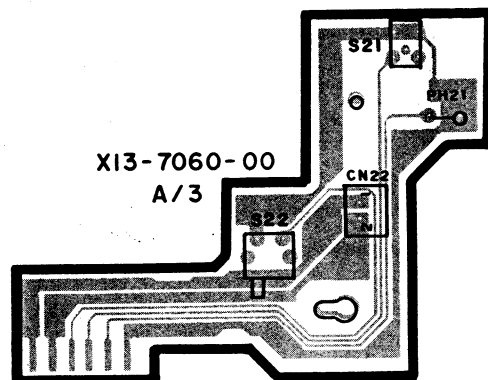


X13-7060-00  
C/3



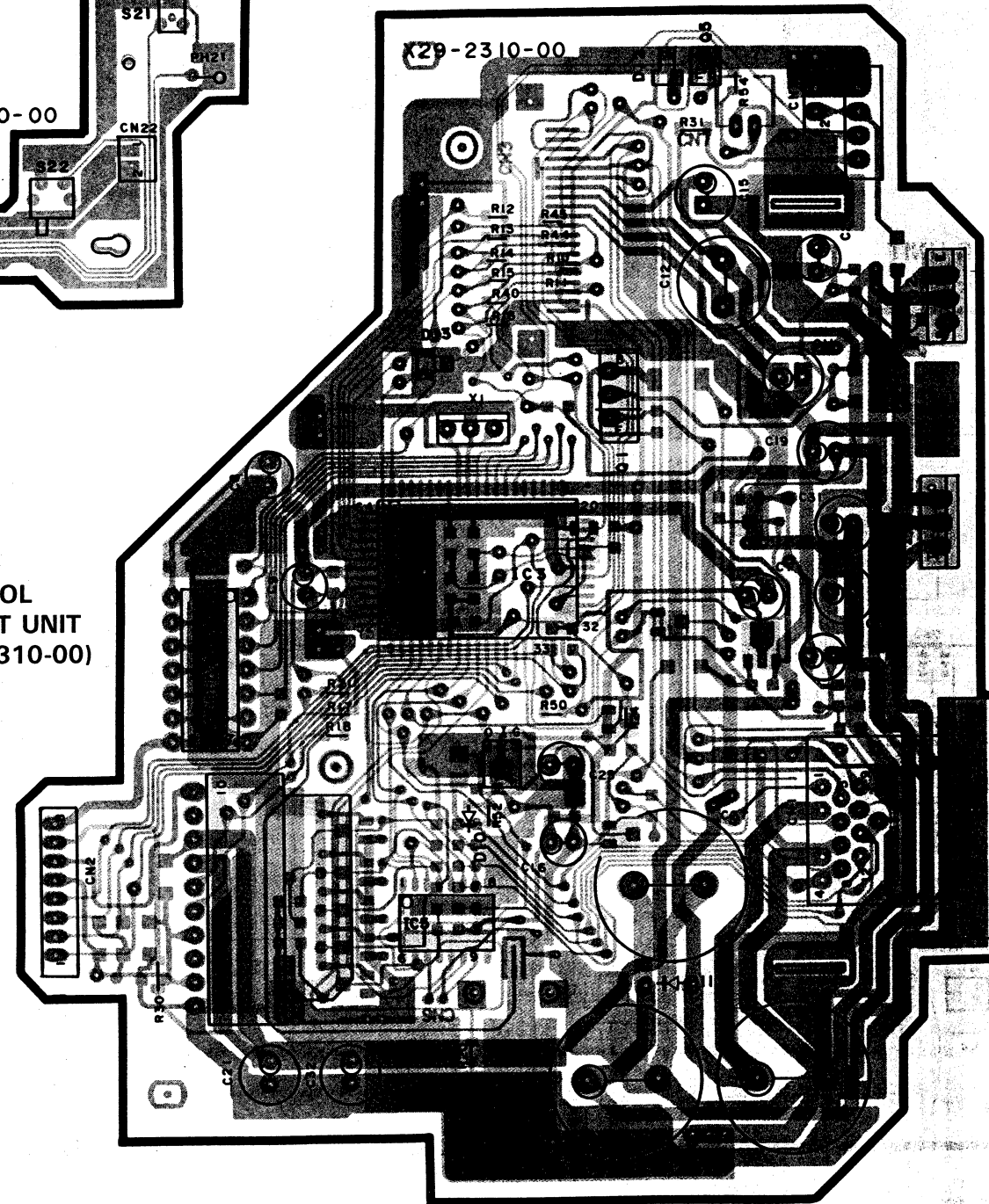
X13-7030-00  
SWITCH UNIT  
(X13-7030-00)

SUB-CIRCUIT UNIT  
(X13-7060-00)

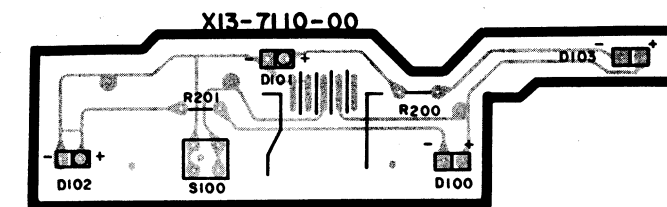


X13-7060-00  
A/3

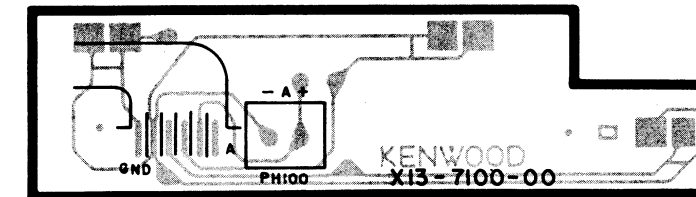
CONTROL  
CIRCUIT UNIT  
(X29-2310-00)



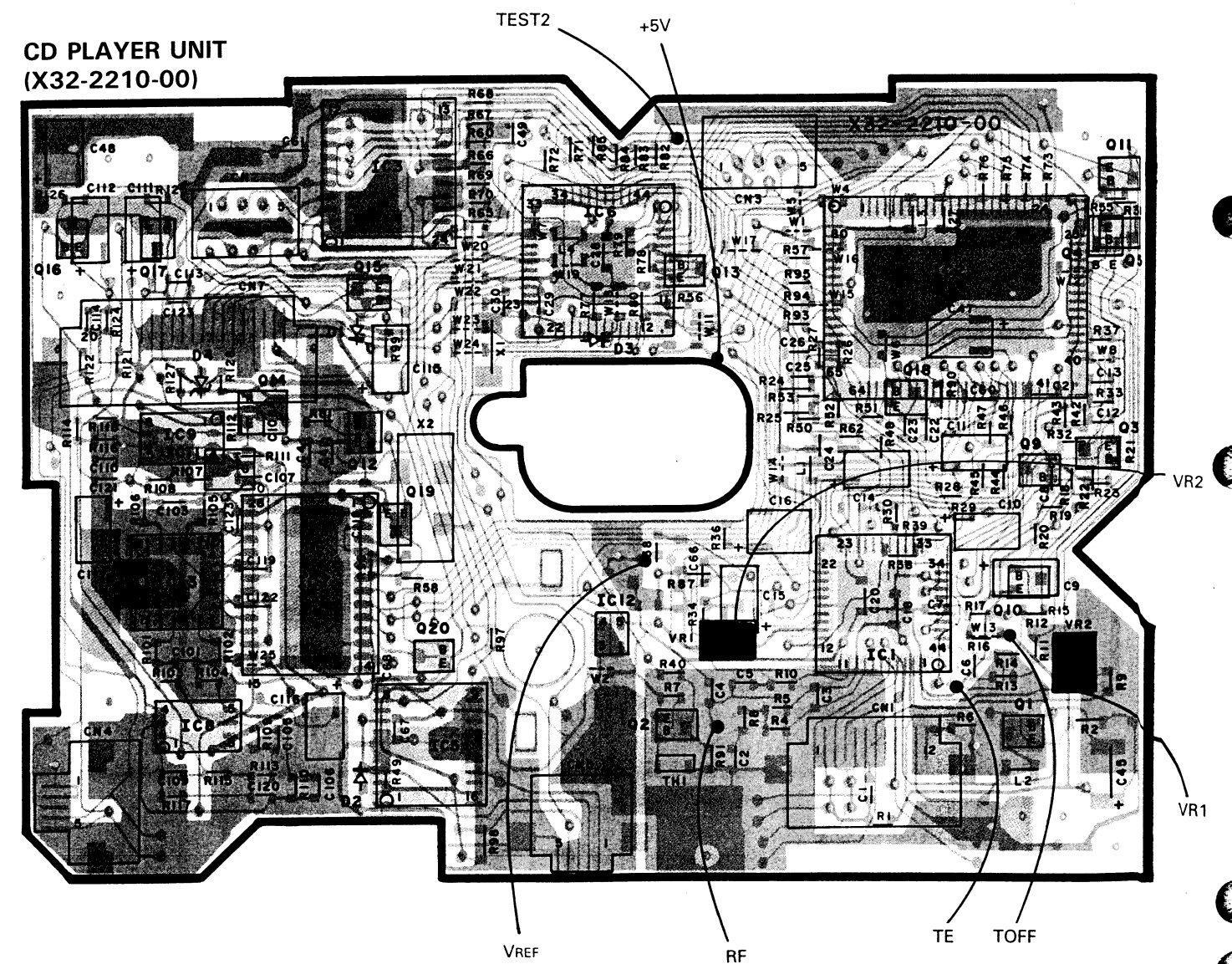
## SUB-CIRCUIT UNIT (X13-7110-00)



## SUB-CIRCUIT UNIT (X13-7100-00)

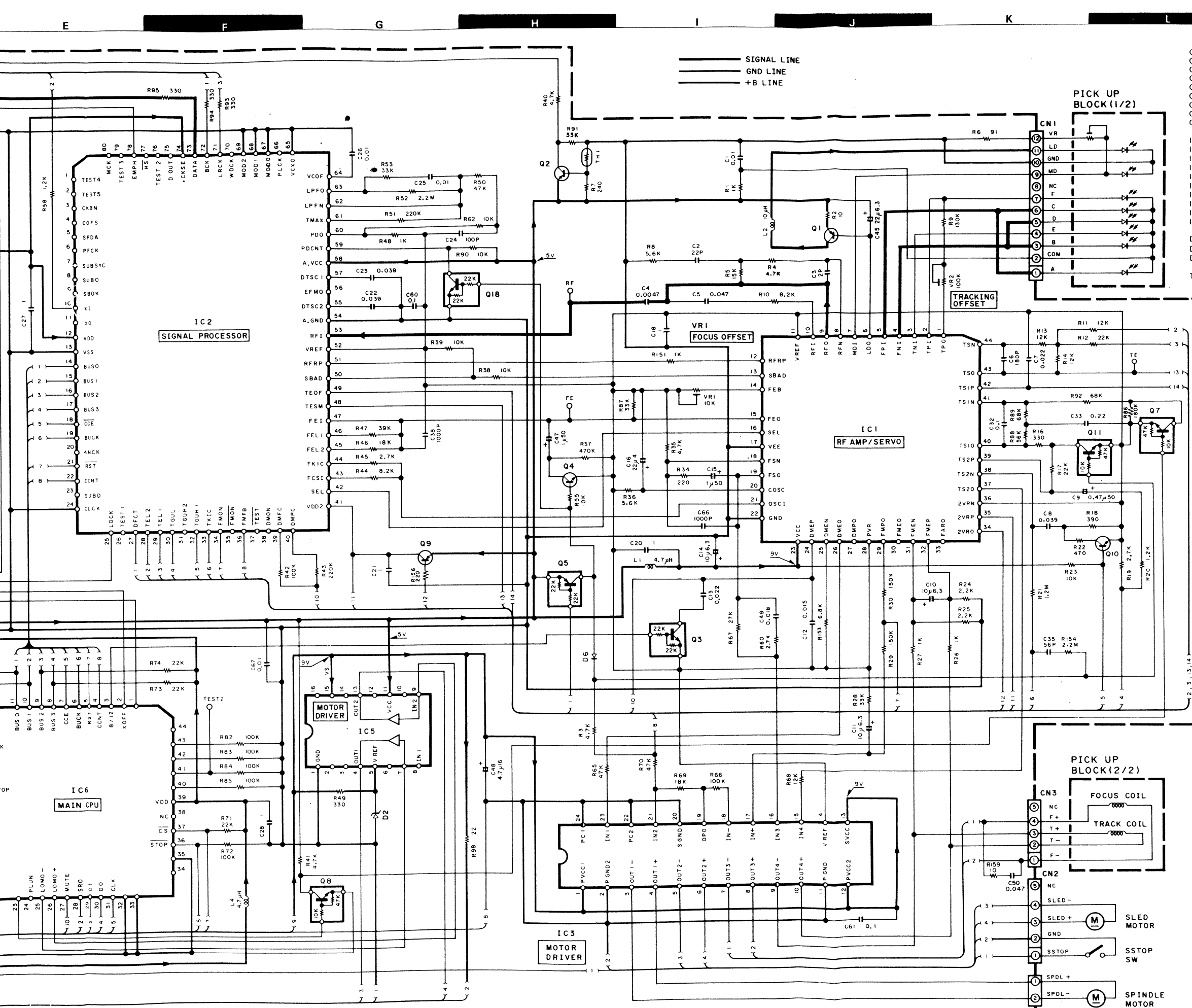


## CD PLAYER UNIT (X32-2210-00)



Refer to the schematic diagram for the values of resistors and capacitors.





- Q1 2SB624 (BV3)  
 Q2,9 2SA1037K  
 Q3,12,18-20 DTC124EK  
 Q4,10 2SC2412K  
 Q5,15 DTA124EK  
 Q13 2SA1362  
 Q14 2SD1624  
 Q16,17 2SD1757K  
 Q7,8,11 DTC114YK
- IC1 TA8191F  
 IC2 TC9236AF  
 IC3 AN8388SR  
 IC5 TA7291F  
 IC6 75008GB 672-3B4  
 IC7 SM5870AS  
 IC8,9 NJM4580E  
 IC11 TA78L05F  
 IC12 TC75U04F  
 IC13 TC74AC04F
- D1,3,6-8 MA110  
 D2 MA8062  
 D4 MA8091
- TH1 NT732BD33K

- DTA124EK  
 DTC114YK  
 DTC124EK  
 2SA1036K  
 2SA1037K  
 2SC2412K  
 2SD1757K

- 2SB1188  
 2SD1624

- 2SB941

- 2SB1050

- NJM4580E

- TA7291F

- TA78L05F

- TA7291P

- AN8388SR

- TC9236AF

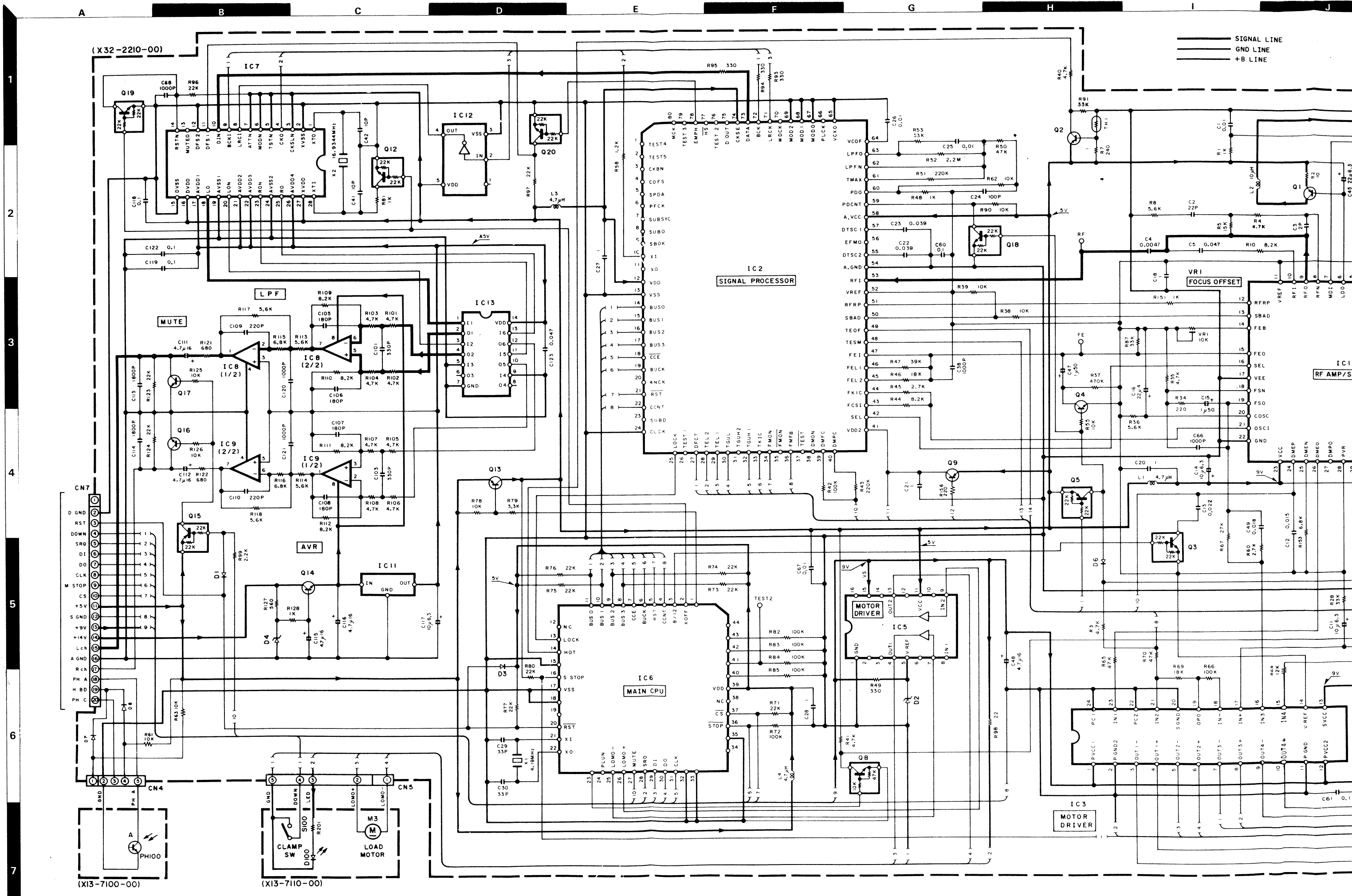
- TA8191F

- M5278D05

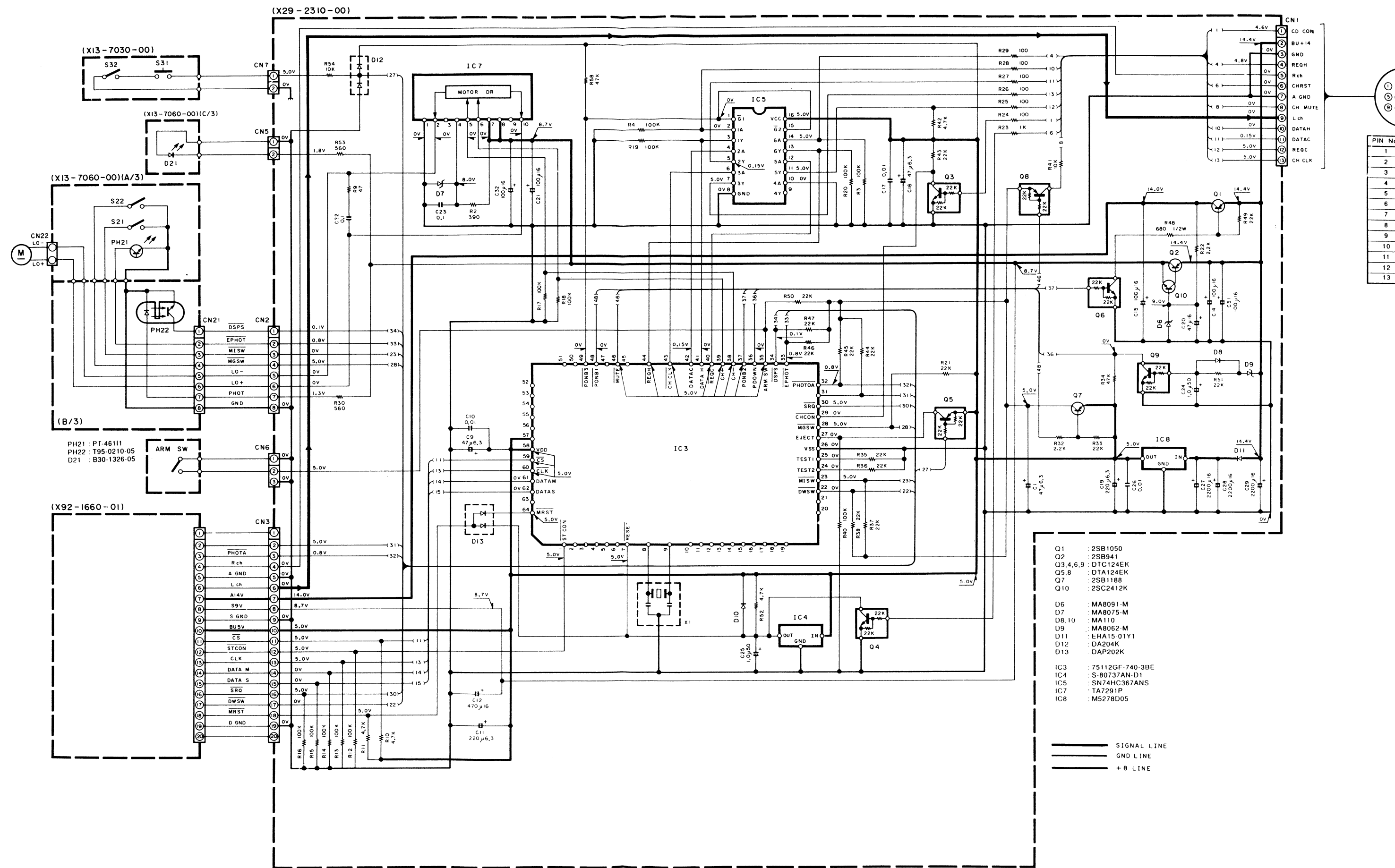
**CAUTION:** For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

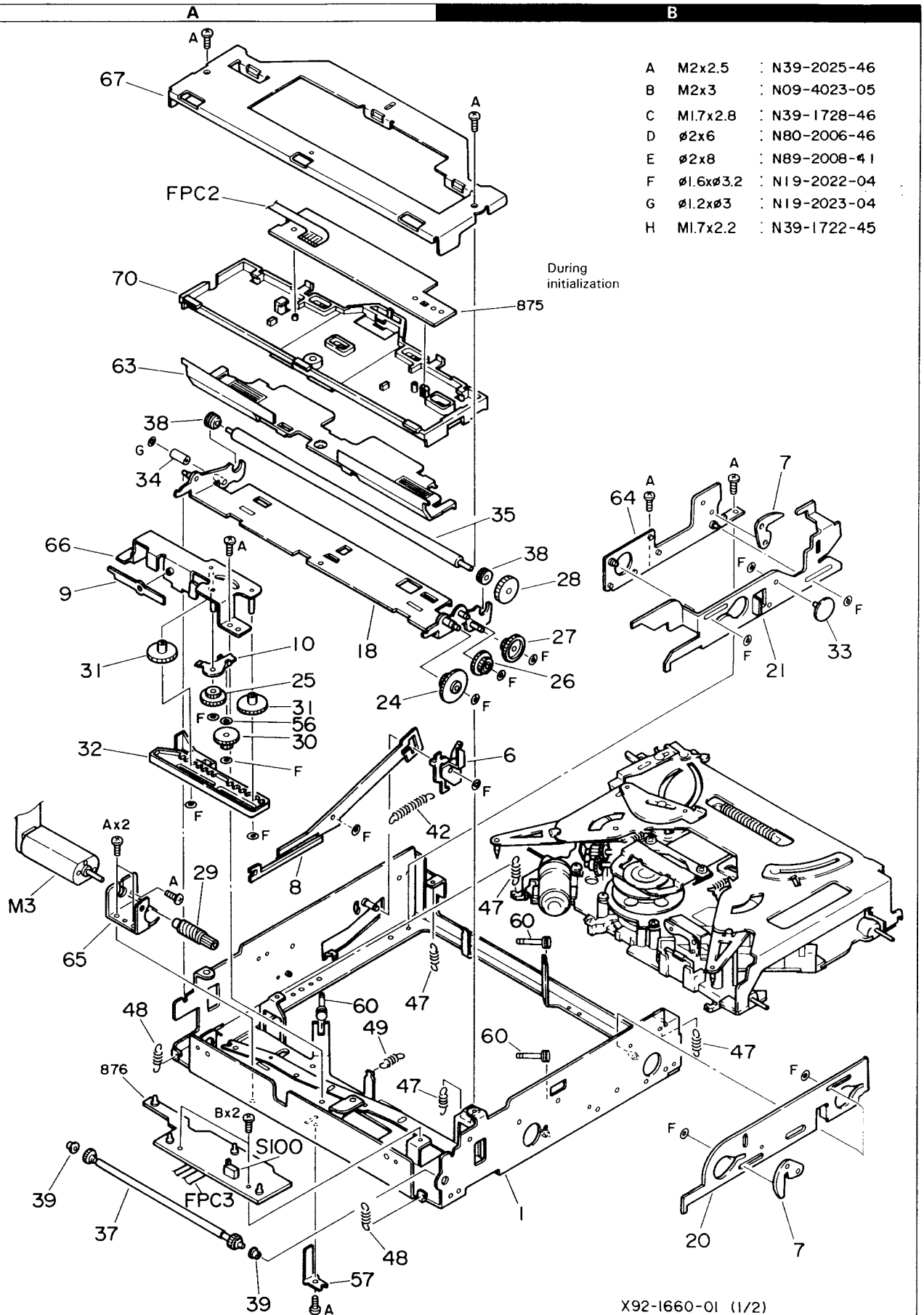
**KDC-C 600**  
**KENWOOD**







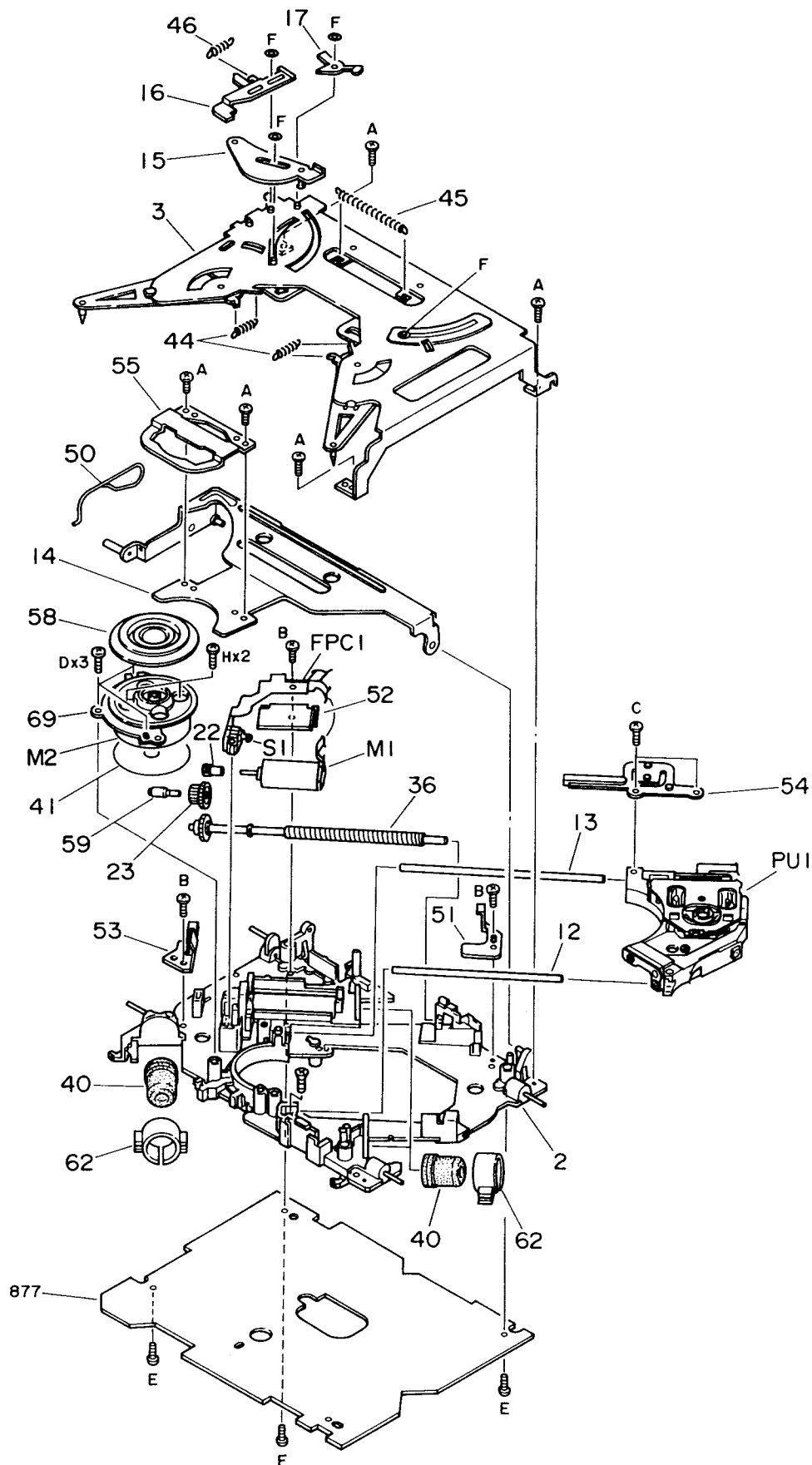
## EXPLODED VIEW (MECHANISM)



Parts with the exploded numbers larger than 700 are not supplied.

# KDC-C600

## EXPLODED VIEW (MECHANISM)

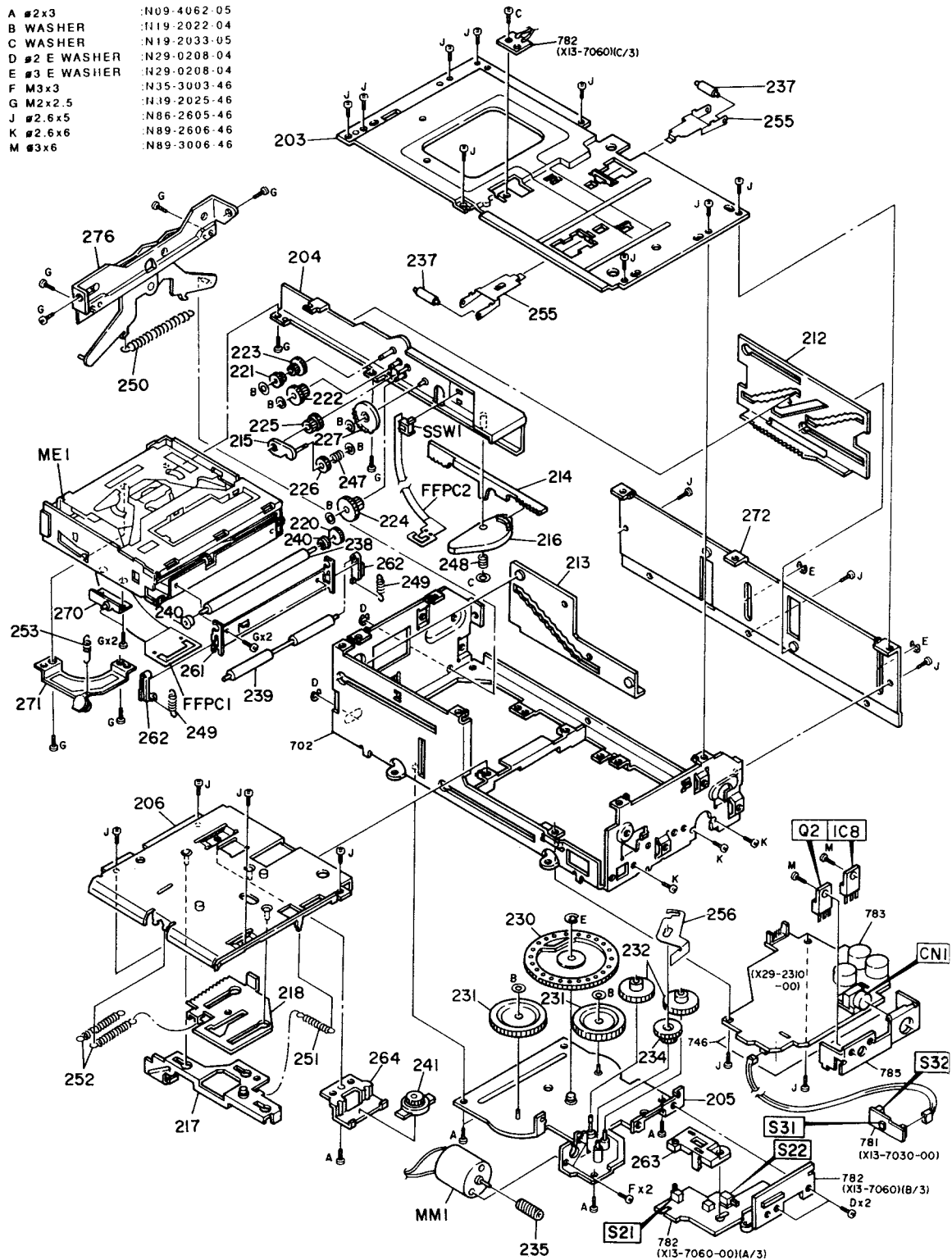


X92-1660-01 (2/2)

Parts with the exploded numbers larger than 700 are not supplied.

## EXPLODED VIEW (UNIT)

A	#2x3	:N09-4062-05
B	WASHER	:N19-2022-04
C	WASHER	:N19-2033-05
D	#2 E WASHER	:N29-0208-04
E	#3 E WASHER	:N29-0208-04
F	M3x3	:N35-3003-46
G	M2x2.5	:N19-2025-46
J	#2.6x5	:N86-2605-46
K	#2.6x6	:N89-2606-46
M	#3x6	:N89-3006-46

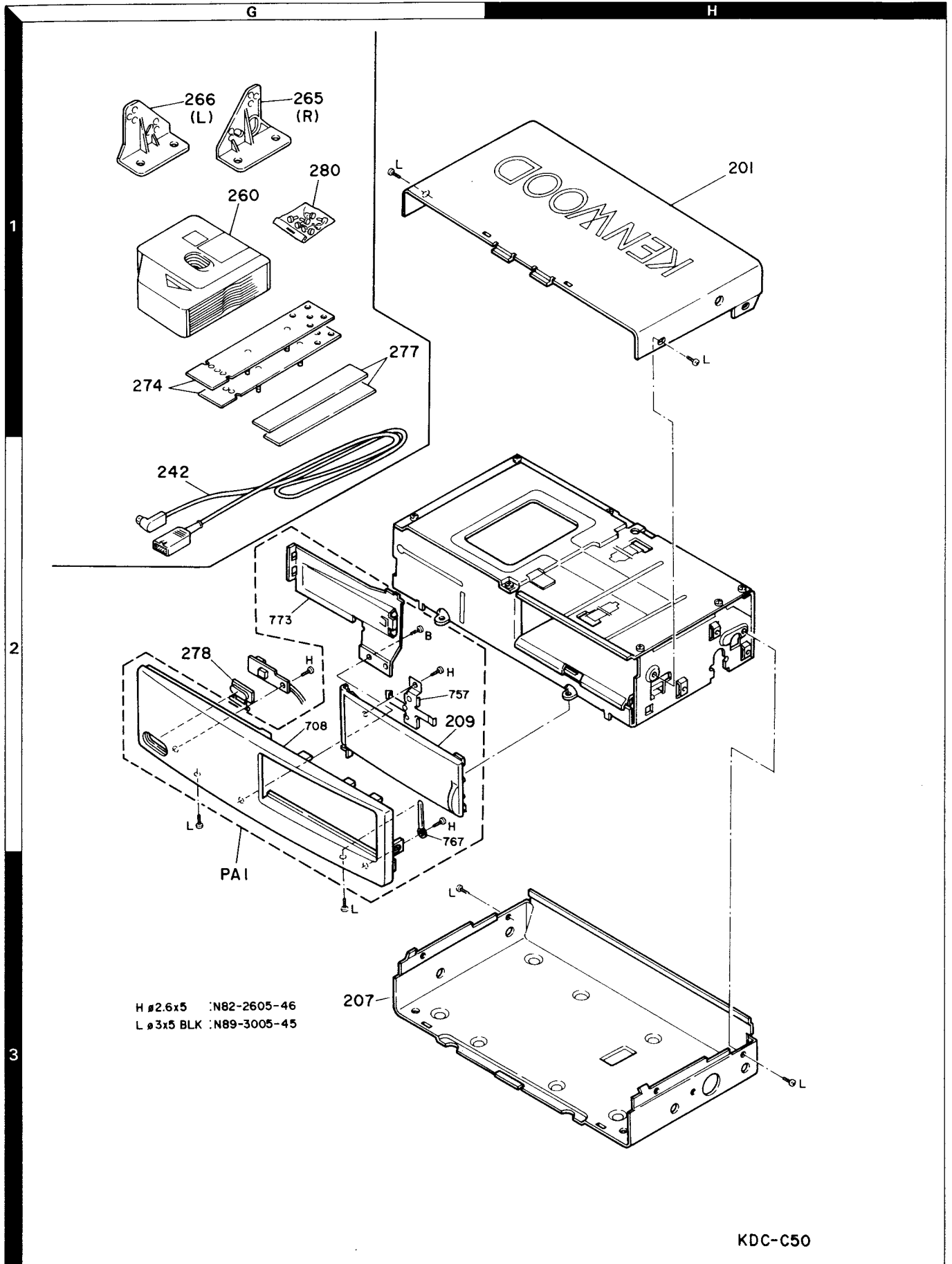


KDC-C50

Parts with the exploded numbers larger than 700 are not supplied.

# KDC-C600

## EXPLODED VIEW (UNIT)



KDC-C50

Parts with the exploded numbers larger than 700 are not supplied.

## PARTS LIST

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
KDC-C600						
201	1H	*	A01-2556-02	METALLIC CABINET	W E	
203	1E, 1F	*	A10-2132-02	CHASSIS		
204	1E	*	A10-2133-03	CHASSIS CALKING ASSY		
205	3F	*	A10-2135-03	CHASSIS CALKING ASSY		
206	3E	*	A10-2137-03	CHASSIS CALKING ASSY		
207	3H	*	A10-2169-02	CHASSIS		
209	2G	*	A21-2316-03	DRESSING PANEL		
PA1	2G	*	A20-7816-03	PANEL ASSY		
-			B46-0100-20	WARRANTY CARD		
-			B46-0172-03	QUESTIONNAIRE CARD		
-			B46-0182-14	ID CARD		
-			B59-0090-00	SERVICE DIRECTORY		
-		*	B64-0139-00	INSTRUCTION MANUAL		
212	1F	*	D10-2718-03	SLIDER		
213	2F	*	D10-2719-04	SLIDER ASSY		
214	2E	*	D10-2723-03	SLIDER		
215	1E	*	D10-2724-04	ARM ASSY		
216	2E	*	D10-2726-04	LEVER		
217	3E	*	D10-2729-04	LEVER ASSY		
218	3E	*	D10-2733-04	SLIDER		
220	2E	*	D13-1044-24	GEAR		
221	1E	*	D13-1089-04	GEAR		
222	1E	*	D13-1090-04	GEAR		
223	1E	*	D13-1091-04	GEAR		
224	2E	*	D13-1092-04	GEAR		
225	1E	*	D13-1093-04	GEAR		
226	2E	*	D13-1094-04	GEAR		
227	1E	*	D13-1095-03	GEAR		
230	3F	*	D13-1096-03	GEAR		
231	3F	*	D13-1097-04	GEAR		
232	3F	*	D13-1099-04	GEAR		
234	3F	*	D13-1100-04	GEAR		
235	3F	*	D13-1101-04	WORM		
237	1E, 1F	*	D14-0625-04	ROLLER		
238	2E	*	D14-0626-03	ROLLER		
239	2E	*	D14-0627-03	ROLLER		
240	2E	*	D23-0905-14	RETAINER		
241	3E	*	D39-0205-05	DAMPER		
242	1G	*	E30-3754-05	CORD WITH PLUG		
247	2E	*	G01-2592-04	COMPRESSION SPRING		
248	2E	*	G01-2593-04	COMPRESSION SPRING		
249	2E	*	G01-2594-04	EXTENSION SPRING		
250	1E	*	G01-2595-04	EXTENSION SPRING		
251	3E	*	G01-2596-04	EXTENSION SPRING		
252	3E	*	G01-2597-04	EXTENSION SPRING		
253	2E	*	G01-2598-04	EXTENSION SPRING		
255	1F	*	G02-1142-04	FLAT SPRING		
256	3F	*	G02-1143-04	FLAT SPRING		
-		*	H01-9421-04	ITEM CARTON CASE		
-		*	H03-3492-04	OUTER CARTON CASE		
-		*	H10-4399-02	POLYSTYRENE FOAMED FIXTURE		
-		*	H10-4414-02	POLYSTYRENE FOAMED FIXTURE		

E: Scandinavia &amp; Europe K: USA P: Canada W: Europe

Y: PX(Far East, Hawaii) T: England M: Other Areas

Y: AAFES(Europe) X: Australia

⚠ indicates safety critical components.

## PARTS LIST

※ New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕 向	Re- marks 備考
-			H25-0271-04	PROTECTION BAG		
260	1G	*	J19-4409-12	HOLDER ASSY		
261	2E	*	J19-4414-04	HOLDER		
262	2E	*	J19-4415-04	HOLDER		
263	3F	*	J19-4416-04	HOLDER		
264	3E	*	J19-4440-04	HOLDER		
265	1G	*	J19-4443-04	BRACKET		
266	1G	*	J19-4444-04	BRACKET		
270	2E	*	J21-7283-04	MOUNTING HARDWARE ASSY		
271	2E	*	J21-7285-04	MOUNTING HARDWARE ASSY		
272	2F	*	J21-7292-03	MOUNTING HARDWARE ASSY		
274	1G	*	J21-7328-04	MOUNTING HARDWARE ASSY		
276	1E	*	J21-7347-03	MOUNTING HARDWARE ASSY		
277	1G	*	J69-0503-04	ADHESIVE TAPE		
FFPC1	2E	*	J84-0029-02	FLEXIBLE PRINTED WIRING BOARD		
FFPC2	2E	*	J84-0030-02	FLEXIBLE PRINTED WIRING BOARD		
278	2G	*	K24-1042-04	KNOB		
280	1G	*	N99-1576-05	SCREW SET		
A	3E	*	N09-4062-05	TAPTITE SCREW (2X 3,+Sライ)		
B	2E, 3F	*	N19-2022-04	FLAT WASHER		
C	2E	*	N19-2033-05	FLAT WASHER		
D	1E	*	N29-0206-04	RETAINING RING (2マ)		
E	2F, 3F	*	N29-0208-04	RETAINING RING (3マ)		
F	3F	*	N35-3003-46	BINDING HEAD MACHIN SCREW		
G	2E	*	N39-2025-46	PAN HEAD MACHIN SCREW		
H	2G	*	N82-2605-46	BINDING HEAD TAPTITE SCREW		
J	1F, 3E	*	N86-2605-46	BINDING HEAD TAPTITE SCREW		
K	2F	*	N89-2606-46	BINDING HEAD TAPTITE SCREW		
L	2G, 3H	*	N89-3005-45	BINDING HEAD TAPTITE SCREW		
SSW1	1E	*	S74-0802-05	MICRO SWITCH		
MM1	3E	*	T42-0720-05	DC MOTOR		
ME1	2F	*	X92-1660-01	MECHANISM ASSY		
<b>SWITCH UNIT (X13-7030-00)</b>						
S31			S40-1607-05	PUSH SWITCH		
S32			S40-1139-05	PUSH SWITCH		
<b>SUB-CIRCUIT UNIT (X13-7060-00)</b>						
D21			B30-1326-05	LED		
S21		*	S40-1140-05	PUSH SWITCH		
S22		*	S74-0801-05	MICRO SWITCH		
PH22		*	T95-0210-05	OPTO ISOLATOR		
PH21			TPS-605(LB)	PHOTO TRANSISTOR		
<b>SUB-CIRCUIT UNIT (X13-7100-00)</b>						
67	1A		J21-7279-02	MOUNTING HARDWARE		
70	1A		J90-0726-02	GUIDE		
FPC2	1A		J84-0022-03	FLEXIBLE PRINTED WIRING BOARD		
PH100			PT-46111	PHOTO TRANSISTOR		

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<b>SUB-CIRCUIT UNIT (X13-7110-00)</b>						
D100			B30-1365-05	LED		
FPC3	3A		J84-0023-02	FLEXIBLE PRINTED WIRING BOARD		
S100	3A		S40-1140-05	PUSH SWITCH		
<b>CONTROL CIRCUIT UNIT (X29-2310-00)</b>						
C1			CE04DW0J470M	ELECTRØ 47UF 6.3WV		
C9			CE04DW0J470M	ELECTRØ 47UF 6.3WV		
C10			CK73FB1H103K	CHIP C 0.010UF K		
C11			CE04DW0J221M	ELECTRØ 220UF 6.3WV		
C12			CE04DW1C471M	ELECTRØ 470UF 16WV		
C14 ,15			CE04DW1C101M	ELECTRØ 100UF 16WV		
C16			CE04DW0J470M	ELECTRØ 47UF 6.3WV		
C17			CK73FB1H103K	CHIP C 0.010UF K		
C19			CE04DW0J221M	ELECTRØ 220UF 6.3WV		
C20			CE04DW1C470M	ELECTRØ 47UF 16WV		
C21			CE04DW1C101M	ELECTRØ 100UF 16WV		
C22 ,23			CK73EB1E104K	CHIP C 0.10UF K		
C24 ,25			CE04DW1H010M	ELECTRØ 1.0UF 50WV		
C26			CK73FB1H103K	CHIP C 0.010UF K		
C27 -29			C90-2518-05	ELECTRØ 2200UF 16WV		
C31 ,32			CE04DW1C101M	ELECTRØ 100UF 16WV		
CN1		*	E56-0805-05	CYLINDRICAL RECEPTACLE		
X1			L78-0507-05	RESONATOR		
M	3F		N89-3006-46	BINDING HEAD TAPTITE SCREW		
R2			RK73EB2B391J	CHIP R 390 J 1/8W		
R3 ,4			RK73FB2A104J	CHIP R 100K J 1/10W		
R9			RK73EB2B470J	CHIP R 47 J 1/8W		
R10 ,11			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R12 -20			RK73FB2A104J	CHIP R 100K J 1/10W		
R21			RK73FB2A223J	CHIP R 22K J 1/10W		
R23			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R24 -29			RK73FB2A101J	CHIP R 100 J 1/10W		
R30			RK73EB2B561J	CHIP R 560 J 1/8W		
R32			RK73EB2B222J	CHIP R 2.2K J 1/8W		
R33			RK73FB2A223J	CHIP R 22K J 1/10W		
R34			RK73FB2A473J	CHIP R 47K J 1/10W		
R35 -38			RK73FB2A223J	CHIP R 22K J 1/10W		
R40			RK73FB2A104J	CHIP R 100K J 1/10W		
R41			RK73FB2A103J	CHIP R 10K J 1/10W		
R42			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R43 -47			RK73FB2A223J	CHIP R 22K J 1/10W		
R48			R92-2063-05	CHIP R 680 J 1/2W		
R49 -51			RK73FB2A223J	CHIP R 22K J 1/10W		
R52			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R53			RK73EB2B561J	CHIP R 560 J 1/8W		
R54			RK73FB2A103J	CHIP R 10K J 1/10W		
R55			RK73EB2B222J	CHIP R 2.2K J 1/8W		
R58			RK73FB2A473J	CHIP R 47K J 1/10W		
D6			MA8091-M	ZENER DIODE		

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D7 D8 D9 D10 D11			MA8075-M MA110 MA8062-M MA110 ERA15-01Y1	ZENER DIODE DIODE ZENER DIODE DIODE DIODE		
D12 D13 IC3 IC4 IC5		*	DA204K DAP202K 75112GF-740-3BE S-80737AN-D1 SN74HC367ANS	DIODE DIODE IC IC IC		
IC7 IC8 Q1 Q2 Q3 , 4			TA7291P MS278D05 2SB1050 2SB941 DTC124EK	IC(MOTOR DRIVER) IC(VOLTAGE REGULATOR) TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR		
Q5 Q6 Q7 Q8 Q9			DTA124EK DTC124EK 2SB1188 DTA124EK DTC124EK	DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR		
Q10			2SC2412K	TRANSISTOR		
<b>CD PLAYER UNIT (X32-2210-00)</b>						
C1 C2 C3 C4 C5			CK73FB1H103K CC73FCH1H220J CC73FCH1H020C CK73FB1H103K CK73FB1E473KTA	CHIP C 0.010UF K CHIP C 22PF J CHIP C 2.0PF C CHIP C 0.010UF K CHIP C 0.047UF K		
C6 C7 C8 C9 C10 , 11			CC73FCH1H181J CK73FB1H223KTA CK73FB1E393KTA C92-1025-05 C92-1020-05	CHIP C 180PF J CHIP C 0.022UF K CHIP C 0.039UF K ELECTRO 0.47UF 50WV ELECTRO 10UF 6.3WV		
C12 C13 C14 C15 C16			CK73FB1H153K CK73FB1H223KTA C92-1020-05 C92-1026-05 C92-1023-05	CHIP C 0.015UF K CHIP C 0.022UF K ELECTRO 10UF 6.3WV ELECTRO 1UF 50WV ELECTRO 22UF 4.0WV		
C18 C20 , 21 C22 , 23 C24 C25 , 26			CK73EF1C105Z CK73EF1C105Z CK73FB1E393KTA CC73FCH1H101J CK73FB1H103K	CHIP C 1.0UF Z CHIP C 1.0UF Z CHIP C 0.039UF K CHIP C 100PF J CHIP C 0.010UF K		
C27 , 28 C29 , 30 C32 C33 C35			CK73EF1C105Z CC73FCH1H330J CK73EB1E104K CK73EB1E224K CC73FCH1H560J	CHIP C 1.0UF Z CHIP C 33PF J CHIP C 0.10UF K CHIP C 0.22UF K CHIP C 56PF J		
C38 C41 , 42 C45 C47 C48			CK73FB1H102K CC73FCH1H100D C92-0012-05 C92-1026-05 C92-1019-05	CHIP C 1000PF K CHIP C 10PF D TANTAL 22UF 6.3WV ELECTRO 1UF 50WV ELECTRO 4.7UF 16WV		
C49 C60 , 61			CK73FB1H183KTA CK73EB1E104K	CHIP C 0.018UF K CHIP C 0.10UF K		

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C66			CK73FB1H102K	CHIP C 1000PF K		
C67			CK73FB1H103K	CHIP C 0.010UF K		
C68			CK73FB1H102K	CHIP C 1000PF K		
C101			CK73FB1H331K	CHIP C 330PF K		
C103			CK73FB1H331K	CHIP C 330PF K		
C105-108			CC73FCH1H181J	CHIP C 180PF J		
C109,110			CK73FB1H221K	CHIP C 220PF K		
C111,112			C92-1019-05	ELECTRØ 4.7UF 16WV		
C113,114			CK73FB1H182K	CHIP C 1800PF K		
C115,116			C92-1019-05	ELECTRØ 4.7UF 16WV		
C117			C92-1020-05	ELECTRØ 10UF 6.3WV		
C118,119			CK73EB1E104K	CHIP C 0.10UF K		
C120,121			CK73FB1H102K	CHIP C 1000PF K		
C122			CK73EB1E104K	CHIP C 0.10UF K		
C123			CK73FB1E473KTA	CHIP C 0.047UF K		
L1			L33-0916-05	SMALL FIXED INDUCTØR		
L2			L40-1001-31	SMALL FIXED INDUCTØR(10UH)		
L3 ,4			L33-0916-05	SMALL FIXED INDUCTØR		
X1			L78-0505-05	RESØNATOR		
X2			L77-2011-05	CRYSTAL RESØNATOR(16.9344MHZ)		
R1			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R2			RK73EB2B100J	CHIP R 10 J 1/8W		
R3			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R4			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R5			RK73FB2A153J	CHIP R 15K J 1/10W		
R6			RK73FB2A910J	CHIP R 91 J 1/10W		
R7			RK73FB2A241J	CHIP R 240 J 1/10W		
R8			RK73FB2A562J	CHIP R 5.6K J 1/10W		
R9			RK73FB2A134J	CHIP R 130K J 1/10W		
R10			RK73FB2A822J	CHIP R 8.2K J 1/10W		
R11			RK73FB2A123J	CHIP R 12K J 1/10W		
R12			RK73FB2A223J	CHIP R 22K J 1/10W		
R13 ,14			RK73FB2A123J	CHIP R 12K J 1/10W		
R15			RK73FB2A221J	CHIP R 220 J 1/10W		
R16			RK73FB2A331J	CHIP R 330 J 1/10W		
R17			RK73FB2A223J	CHIP R 22K J 1/10W		
R18			RK73FB2A391J	CHIP R 390 J 1/10W		
R19			RK73FB2A272J	CHIP R 2.7K J 1/10W		
R20			RK73FB2A122J	CHIP R 1.2K J 1/10W		
R21			RK73FB2A125J	CHIP R 1.2M J 1/10W		
R22			RK73FB2A471J	CHIP R 470 J 1/10W		
R23			RK73FB2A103J	CHIP R 10K J 1/10W		
R24 ,25			RK73EB2B222J	CHIP R 2.2K J 1/8W		
R26 ,27			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R28			RK73FB2A333J	CHIP R 33K J 1/10W		
R29 ,30			RK73FB2A154J	CHIP R 150K J 1/10W		
R33			RK73FB2A473J	CHIP R 47K J 1/10W		
R34			RK73FB2A221J	CHIP R 220 J 1/10W		
R35			RK73EB2B472J	CHIP R 4.7K J 1/8W		
R36			RK73FB2A562J	CHIP R 5.6K J 1/10W		
R37			RK73FB2A474J	CHIP R 470K J 1/10W		
R38			RK73EB2B103J	CHIP R 10K J 1/8W		
R39			RK73FB2A103J	CHIP R 10K J 1/10W		
R40 ,41			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R42			RK73FB2A104J	CHIP R 100K J 1/10W		

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R43			RK73FB2A224J	CHIP R 220K J 1/10W		
R44			RK73FB2A822J	CHIP R 8.2K J 1/10W		
R45			RK73FB2A272J	CHIP R 2.7K J 1/10W		
R46			RK73FB2A183J	CHIP R 18K J 1/10W		
R47			RK73FB2A393J	CHIP R 39K J 1/10W		
R48			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R49			RK73FB2A331J	CHIP R 330 J 1/10W		
R50			RK73FB2A473J	CHIP R 47K J 1/10W		
R51			RK73FB2A224J	CHIP R 220K J 1/10W		
R52			RK73FB2A225J	CHIP R 2.2M J 1/10W		
R53			RK73FB2A333J	CHIP R 33K J 1/10W		
R55			RK73FB2A103J	CHIP R 10K J 1/10W		
R58			RK73FB2A122J	CHIP R 1.2K J 1/10W		
R60			RK73FB2A272J	CHIP R 2.7K J 1/10W		
R61 -63			RK73FB2A103J	CHIP R 10K J 1/10W		
R65			RK73FB2A563J	CHIP R 56K J 1/10W		
R66			RK73FB2A104J	CHIP R 100K J 1/10W		
R67			RK73FB2A273J	CHIP R 27K J 1/10W		
R68			RK73FB2A123J	CHIP R 12K J 1/10W		
R69			RK73FB2A183J	CHIP R 18K J 1/10W		
R70			RK73FB2A473J	CHIP R 47K J 1/10W		
R71			RK73FB2A223J	CHIP R 22K J 1/10W		
R72			RK73FB2A104J	CHIP R 100K J 1/10W		
R73 -76			RK73FB2A223J	CHIP R 22K J 1/10W		
R77			RK73EB2B223J	CHIP R 22K J 1/8W		
R78			RK73FB2A103J	CHIP R 10K J 1/10W		
R79			RK73FB2A332J	CHIP R 3.3K J 1/10W		
R80			RK73EB2B223J	CHIP R 22K J 1/8W		
R81			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R82 -85			RK73FB2A104J	CHIP R 100K J 1/10W		
R86			RK73FB2A184J	CHIP R 180K J 1/10W		
R87			RK73FB2A333J	CHIP R 33K J 1/10W		
R88			RK73EB2B563J	CHIP R 56K J 1/8W		
R89			RK73EB2B683J	CHIP R 68K J 1/8W		
R90			RK73FB2A103J	CHIP R 10K J 1/10W		
R91			RK73FB2A333J	CHIP R 33K J 1/10W		
R92			RK73EB2B683J	CHIP R 68K J 1/8W		
R93 -95			RK73FB2A331J	CHIP R 330 J 1/10W		
R96 ,97			RK73FB2A223J	CHIP R 22K J 1/10W		
R98			RK73EB2B220J	CHIP R 22 J 1/8W		
R99			RK73FB2A222J	CHIP R 2.2K J 1/10W		
R101-108			RK73FB2A472J	CHIP R 4.7K J 1/10W		
R109-112			RK73FB2A822J	CHIP R 8.2K J 1/10W		
R113, 114			RK73FB2A562J	CHIP R 5.6K J 1/10W		
R115, 116			RK73FB2A682J	CHIP R 6.8K J 1/10W		
R117, 118			RK73FB2A562J	CHIP R 5.6K J 1/10W		
R121, 122			RK73FB2A681J	CHIP R 680 J 1/10W		
R123, 124			RK73FB2A223J	CHIP R 22K J 1/10W		
R125, 126			RK73FB2A103J	CHIP R 10K J 1/10W		
R127			RK73FB2A561J	CHIP R 560 J 1/10W		
R128			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R151			RK73FB2A102J	CHIP R 1.0K J 1/10W		
R153			RK73FB2A682J	CHIP R 6.8K J 1/10W		
R154			RK73FB2A225J	CHIP R 2.2M J 1/10W		
R156			RK73FB2A221J	CHIP R 220 J 1/10W		

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VR1 VR2 W1 ,2 W4 -7 W11 -25			R12-6423-05 R12-6429-05 R92-2052-05 R92-2052-05 R92-2053-05	TRIM POT. 10K TRIMMING POT.(100K) CHIP R 0 J 1/10W CHIP R 0 J 1/10W CHIP R 0 J 1/8W		
D1 D2 D3 D4 D6 -8			MA110 MA8062 MA110 MA8091 MA110	DIODE ZENER DIODE DIODE ZENER DIODE DIODE		
IC1 IC2 IC3 IC5 IC6			TA8191F TC9236AF AN8388SR TA7291F 75008GB-672-3B4	IC(CD FOCUS, TRACKING SERVØ) IC(CD 1CHIP PROCESSOR) IC IC IC		
IC7 IC8 ,9 IC11 IC12 IC13			SM5870AS NJM4580E TA78L05F TC7SU04F TC74AC04F	IC IC(OP AMP) IC(VOLTAGE REGULATOR/ +5V) IC(INVERTER) IC		
Q1 Q2 Q3 Q4 Q5			2SB624(BV3) 2SA1037K DTC124EK 2SC2412K DTA124EK	TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR		
Q7 ,8 Q9 Q10 Q11 Q12			DTC114YK 2SA1037K 2SC2412K DTC114YK DTC124EK	DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR		
Q13 Q14 Q15 Q16 ,17 Q18 -20			2SA1036K 2SD1624 DTA124EK 2SD1757K DTC124EK	TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR DIGITAL TRANSISTOR		
TH1			NT732BTD33K	THERMISTOR		
<b>MECHANISM ASS'Y (X92-1660-01)</b>						
1 2 3	3A 3D 1C		A10-2122-12 A10-2124-13 A10-2127-13	CHASSIS CALKING ASSY CHASSIS ASSY CHASSIS CALKING ASSY		
6 7 8 9 10	2B 2B, 3B 2A 2A 2A		D10-2693-14 D10-2695-14 D10-2696-03 D10-2697-04 D10-2698-04	LEVER LEVER LEVER LEVER ARM ASSY		
12 13 14 15 16	2D 2D 2C 1C 1C		D10-2700-04 D10-2701-04 D10-2702-04 D10-2712-14 D10-2714-04	ROD ROD LEVER ASSY LEVER ASSY LEVER		
17 18 20 21	1C 2A 3B 2B		D10-2715-04 D10-2716-03 D12-0604-13 D12-0605-13	LEVER LEVER ASSY CAM CAM		

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22	2C		D13-1029-24	GEAR		
23	2C		D13-1030-24	GEAR		
24	2B		D19-0605-04	CLUTCH ASSY		
25	2A		D13-1040-04	GEAR		
26	2B		D13-1042-44	GEAR		
27	2B		D13-1043-04	GEAR		
28	2B		D13-1044-24	GEAR		
29	3A		D13-1083-04	WORM		
30	2A		D13-1084-04	GEAR		
31	1A		D13-1085-14	GEAR		
32	2A		D13-1086-03	LACK (GEAR)		
33	2B		D14-0622-04	ROLLER ASSY		
34	1A		D14-0633-04	ROLLER		
35	2A		D14-0624-13	ROLLER		
36	2D		D21-2109-14	SHAFT ASSY		
37	3A		D21-2111-14	SHAFT ASSY		
38	1A		D23-0905-24	RETAINER		
39	3A		D23-0910-04	RETAINER		
40	3C, 3D	*	D39-0206-03	DAMPER		
41	2C		F20-1708-04	INSULATING SHEET		
42	2A		G01-2584-04	EXTENSION SPRING		
43	2C		G01-2585-04	EXTENSION SPRING		
44	1C		G01-2586-04	EXTENSION SPRING		
45	1D		G01-2587-04	EXTENSION SPRING		
46	1C		G01-2588-04	EXTENSION SPRING		
47	2B		G01-2590-04	EXTENSION SPRING		
48	3A		G01-2591-14	EXTENSION SPRING		
49	3A	*	G01-2604-04	EXTENSION SPRING		
50	1C		G01-2630-04	TORSION COIL SPRING		
51	2D		G02-1136-04	FLAT SPRING		
52	2C		G02-1138-04	FLAT SPRING		
53	2C		G02-1139-04	FLAT SPRING		
54	2D		G02-1140-03	FLAT SPRING ASSY		
55	1C		G02-1151-04	FLAT SPRING		
56	2A		G02-1156-04	FLAT SPRING		
57	3A		G02-1157-04	FLAT SPRING		
58	2C		J11-0603-03	CLAMPER		
59	2C		J12-0662-04	PIN		
60	3B		J12-0663-04	PIN		
62	3C, 3D		J19-4411-04	HOLDER		
63	1A		J19-4412-03	HOLDER		
64	2B		J21-7268-04	MOUNTING HARDWARE ASSY		
65	3A		J21-7270-03	MOUNTING HARDWARE		
66	2A		J21-7271-04	MOUNTING HARDWARE ASSY		
69	2C		J30-1014-14	SPACER		
FPC1	2C		J84-0021-03	FLEXIBLE PRINTED WIRING BOARD		
A	1A		N39-2025-46	PAN HEAD MACHIN SCREW		
B	3A		N09-4023-05	MACHINE SCREW (M2X3, +セウ)		
C	2C		N39-1728-46	PAN HEAD MACHIN SCREW		
D	2C		N80-2006-46	PAN HEAD TAPTITE SCREW		
E	3C		N89-2008-41	BINDING HEAD TAPTITE SCREW		
F	2B		N19-2022-04	FLAT WASHER		
G	1A		N19-2023-04	FLAT WASHER		

E: Scandinavia & Europe K: USA P: Canada W: Europe

Y: PX(Far East, Hawaii) T: England M: Other Areas

Y: AAFES(Europe) X: Australia

△ indicates safety critical components.

## PARTS LIST

× New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
H	2C		N39-1722-45	PAN HEAD MACHIN SCREW		
S1	2C		S40-1112-05	PUSH SWITCH		
M1	2C		T42-0704-15	DC MOTOR		
M2	2C		T42-0718-05	MOTOR ASSY		
M3	2A		T42-0721-05	DC MOTOR		
PU1	2B		T25-0202-05	OPTICAL PICKUP HEAD		

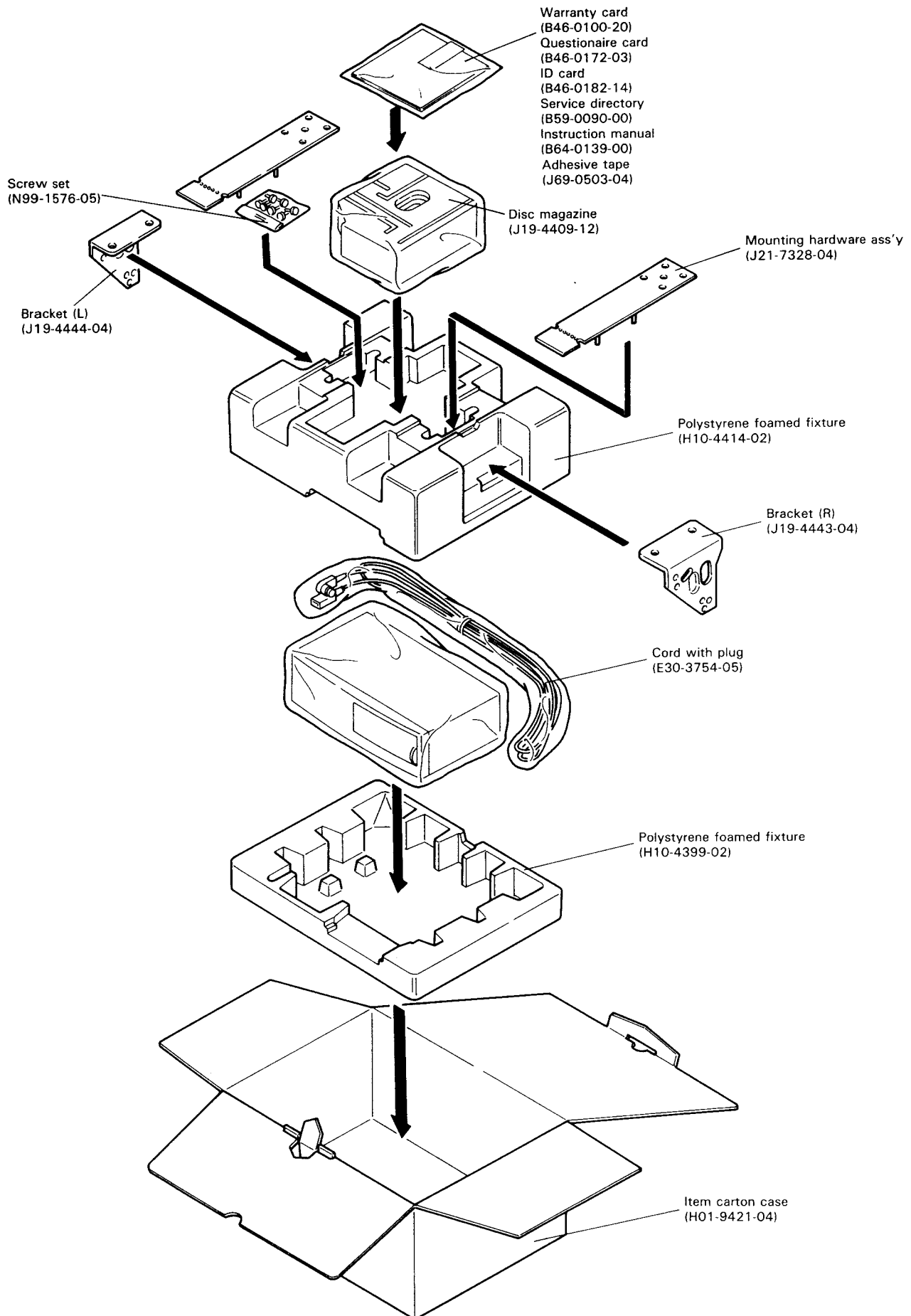
E: Scandinavia &amp; Europe K: USA P: Canada W: Europe

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# KDC-C600

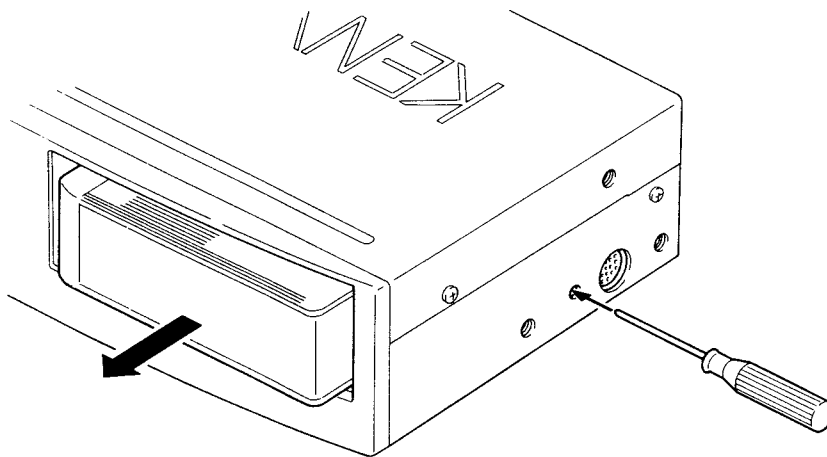
## PACKING



**SERVICE NOTE**

When power is not supplied to the unit, the disc magazine can be forced open with the following operation.

Insert a thin screwdriver or a rod into the hole on the right side of the unit, and push lightly. The internal lock will be released and the disc magazine will be ejected.

**(Caution)**

If the operation above is performed while a disc is present in the CD mechanism, the disc will remain inside the unit even after the disc magazine had been ejected.

With this condition, when the unit is set to the normal operation mode (with the power supplied) and the magazine is inserted, the disc remaining inside will be recovered in the lowest position (disc No. 1) of the disc magazine.

Therefore, if the disc magazine is inserted with a disc present in the lowest position (disc No. 1), the two discs will collide and malfunction will result.



# KDC-C600

## SPECIFICATIONS

Specifications subject to change without notice.

### Disc Section

Laser Diode .....	GaAlAs ( $\lambda = 780 \text{ nm}$ )
Digital Filter .....	4 Times Over Sampling
D/A Converter .....	1 bit
Sampling Frequency .....	44.1 kHz
Conversion Rate .....	176.4 kHz
Spindle Speed .....	500 ~ 200 rpm (CLV)
Wow & Flutter .....	Below Measurable Limit
Frequency Response ( $\pm 1 \text{ dB}$ ) .....	5 Hz ~ 20 kHz
Total Harmonic Distortion (1 kHz) .....	0.005%
Signal to Noise Ratio .....	94 dB
Dynamic Range .....	94 dB
Channel Separation .....	85 dB

### Laser Diode Properties

Material .....	GaAlAs
Wavelength .....	780 nm
Emission Duration .....	Continuous
Laser Output Power .....	Less than 44.6 $\mu\text{W}$

\* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

### General

Operating Voltage .....	14.4 V (11 ~ 16 V)
Current Consumption .....	0.8 A
Operating Temperature .....	-10 ~ 50 °C
Installation Size (W x H x D) .....	281 x 76 x 171 mm (11-1/16 x 3 x 6-3/4 in.)
Weight .....	3.1 kg (6.8 lb)

KENWOOD follows a policy of continuous advancements in development.

For this reason specifications may be changed without notice.

DOLBY and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Noise reduction circuit made under license from Dolby Laboratories Licensing Corporation.

KENWOOD poursuit une politique de progrès constants en ce qui concerne le développement.

Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

La marque DOLBY et le double "D" sont des marques déposées des Dolby Laboratories.

Le système de réduction du bruit de fond est fabriqué sous licence des Dolby Laboratories.

KENWOOD strebt ständige Verbesserungen in der Entwicklung an.

Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

DOLBY und Doppel-D-Symbol sind eingetragene Warenzeichen der Dolby Laboratories.

Dolby-Rauschunterdrückung mit Lizenz der Dolby Laboratories gefertigt.

### Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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